aiwa

COMPACT DISC STEREO SYSTEM

NSX-S505
NSX-S506

OPERATING INSTRUCTIONS

En (English)

R·D·S EON

COMPACT disc DIGITAL AUDIO

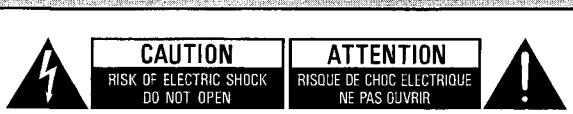
88-NF7-916-01
980220AMI-U-9

EZ

Printed by: Schaltungsdienst Lange Berlin (Germany)

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



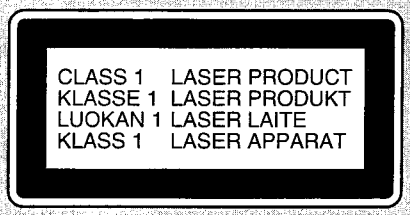
CAUTION

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This compact disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the exterior.



CAUTION!

Invisible laser radiation when open and inter locks defeated. Avoid exposure to beam.

ADVARSEL!
Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laitteen käyttäminen muulla kuin tässä käyttöohjeessaa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!
Om apparaten används på annat sätt än i denna bruksanvisning specificerats, kan användaren utsätta för osnylig laser-strålning, som överskrider gränsen för laserklass 1.

PRECAUTIONS

Read the Operating Instructions carefully and completely before operating the unit. Be sure to keep the Operating Instructions for future reference. All warnings and cautions in the Operating Instructions and on the unit should be strictly followed, as well as the safety suggestions below.

Installation

1 **Water and moisture** — Do not use this unit near water, such as near a bath, sink, swimming pool, or the like.
2 **Heat** — Do not use this unit near sources of heat, including heating vents, stoves, or other appliances that generate heat. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).
3 **Mounting surface** — Place the unit on a flat, even surface.
4 **Ventilation** — The unit should be situated with adequate space around it so that proper heat ventilation is assured. Allow 10 cm (4 in.) clearance from the rear and the top of the unit, and 5 cm (2 in.) from each side.
- Do not place the unit on a bed, rug, or similar surface that may block the ventilation openings.
- Do not install the unit in a bookcase, cabinet, or airtight rack where ventilation may be impeded.

5 **Objects and liquid entry** — Take care that objects or liquids do not get inside the unit through the ventilation openings.
6 **Carts and stands** — When placed or mounted on a stand or cart, the unit should be moved with care.
Quick stops, excessive force, and uneven surfaces may cause the unit or cart to overturn or fall.
7 **Condensation** — Moisture may form on the CD pickup lens when:
- The unit is moved from a cold spot to a warm spot.
- The heating system has just been turned on.
- The unit is used in a very humid room.
- The unit is cooled by an air conditioner.

When this unit has condensation inside, it may not function normally. Should this occur, leave the unit for a few hours, then try to operate again.
8 **Wall or ceiling mounting** — The unit should not be mounted on a wall or ceiling, unless specified in the Operating Instructions.

Electric Power

1 **Power sources** — Connect this unit only to power sources specified in the Operating Instructions, and as marked on the unit.
2 **AC power cord**
- When disconnecting the AC power cord, pull it out by the AC power plug. Do not pull the cord itself.
- Never handle the AC power plug with wet hands, as this could result in fire or shock.
- Power cords should be firmly secured to avoid being severely bent, pinched, or walked upon. Pay particular attention to the cord from the unit to the power socket.
- Avoid overloading AC power plugs and extension cords beyond their capacity, as this could result in fire or shock.

3 **When not in use** — Unplug the AC power plug from the power socket if the unit will not be used for several months or more. When the cord is plugged in, a small amount of current continues to flow to the unit, even when the power is turned off.

Maintenance

Clean the unit only as recommended in the Operating Instructions.

Damage Requiring Service

Have the units serviced by a qualified service technician if:

- The AC power cord or plug has been damaged.
- Foreign objects or liquid have got inside the unit.
- The unit has been exposed to rain or water.
- The unit does not seem to operate normally.
- The unit exhibits a marked change in performance.
- The unit has been dropped, or the cabinet has been damaged.

DO NOT ATTEMPT TO SERVICE THE UNIT YOURSELF.

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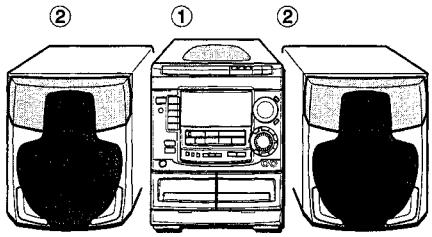
En

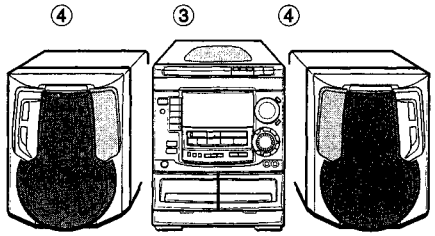
CONNECTIONS

Check your system and accessories

NSX-S505



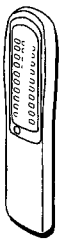
NSX-S506



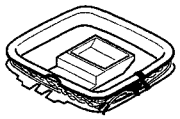
① CX-NS505 Compact disc stereo cassette receiver
② SX-FNS505 Front speakers (For NSX-S505)
③ CX-NS506 Compact disc stereo cassette receiver
④ SX-ANS706 Front speakers (For NSX-S506)

Common

Remote control



MW/LW loop antenna



FM antenna

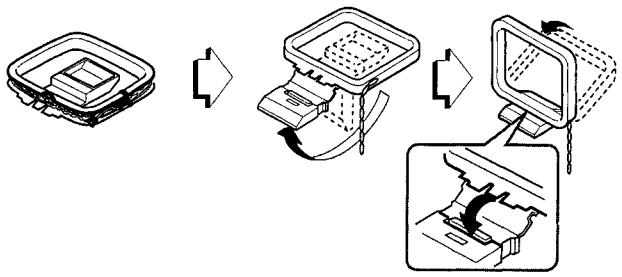
Operating Instructions, etc

Before connecting the AC cord
The rated voltage of your unit shown on the rear panel is 230 V AC. Check that the rated voltage matches your local voltage.

IMPORTANT
Connect the speakers, antennas, and all optional equipment first. Then connect the AC cord in the end.

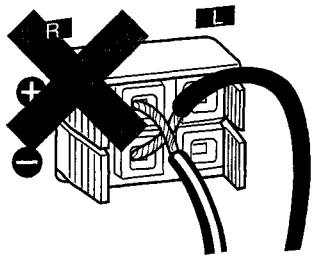
To position the antennas
FM unipolar antenna:
Extend fully and position for the best possible reception.
This antenna is of an instant type, so the use of an outdoor antenna is recommended.
MW/LW loop antenna:
Position to find the best possible reception.

To stand the MW/LW loop antenna on a surface
Fix the claw to the slot.



NOTE

- Be sure to connect the speaker cords correctly. Improper connections can cause short circuits in **SPEAKERS** terminals.



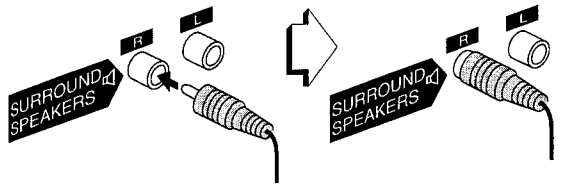
- Do not leave objects generating magnetism, such as credit cards, near the speakers, as these objects may be damaged.
- Do not bring the FM antenna near metal objects or curtain rails.
- Do not bring the MW/LW loop antenna near other optional equipment, the stereo system itself, the AC cord or speaker cords, since noise will be picked up.
- Do not unwind the MW/LW loop antenna wire.

NSX-S505/NSX-S506

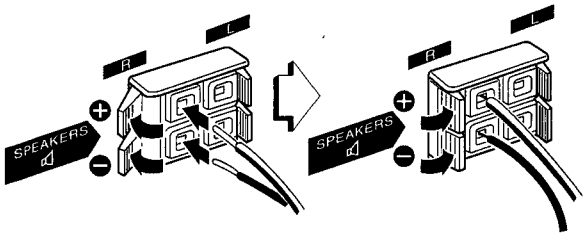
Speakers
The speaker marked R is the right speaker, and the marked L is the left speaker.

1 Connect the right speaker to the main unit.

① Connect the surround speaker cord to **SURROUND SPEAKERS R** terminal.



② Connect the speaker cord to **SPEAKERS R** terminals.



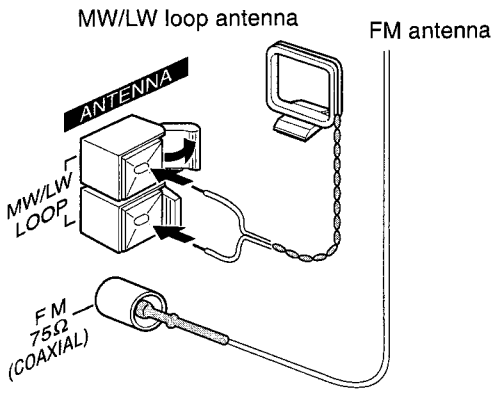
The speaker cord with the white stripe should be connected to the ⊕ terminal and the black cord to the ⊖ terminal.

2 Connect the left speaker to the main unit.

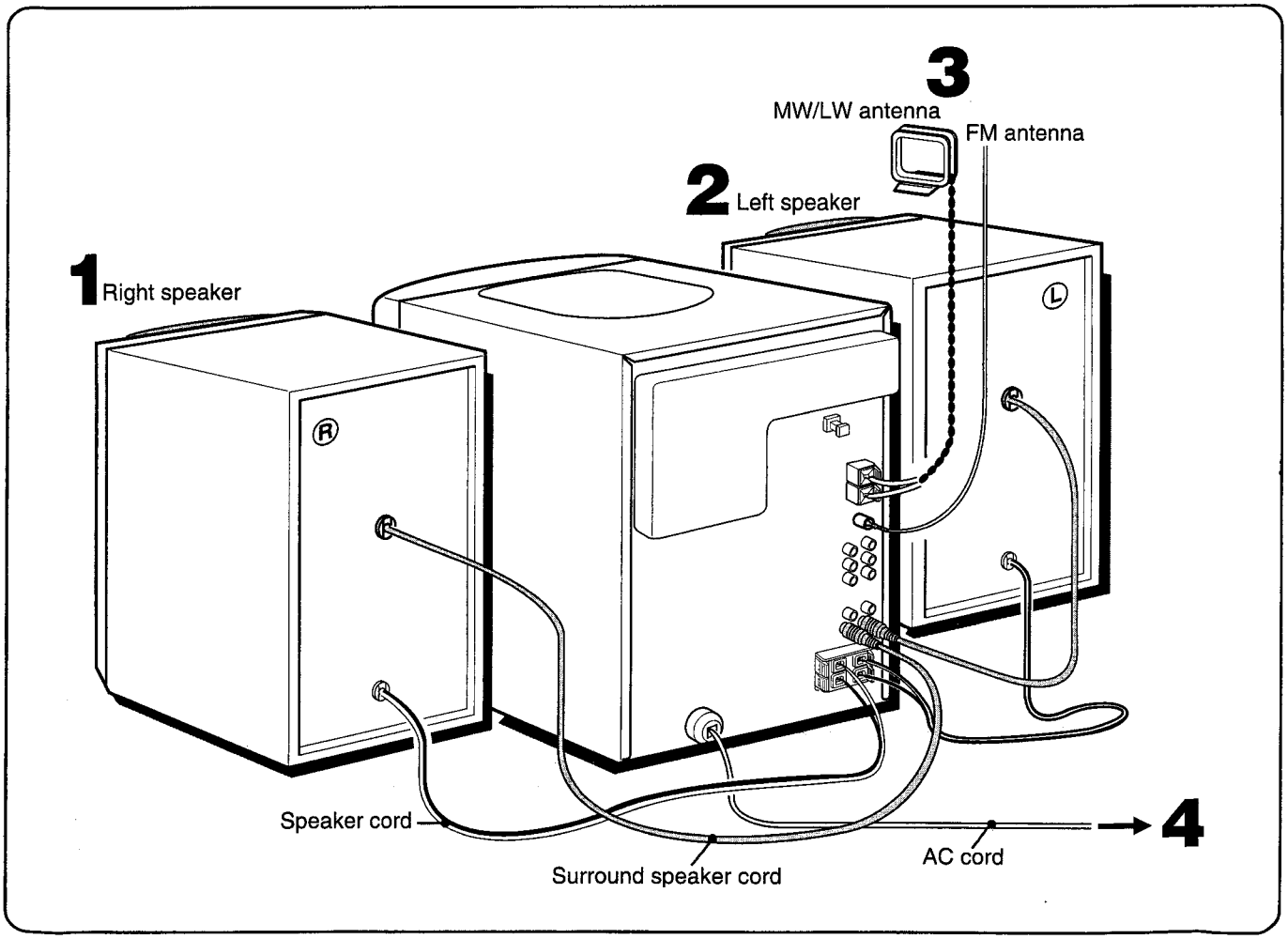
Connect the surround speaker cord to **SURROUND SPEAKERS L** terminal, and speaker cord to **SPEAKERS L** terminals in the same manner as step 1.

3 Connect the supplied antennas.

Connect the FM antenna to **FM 75 Ω** terminal and the MW/LW loop antenna to **MW/LW LOOP** terminals.

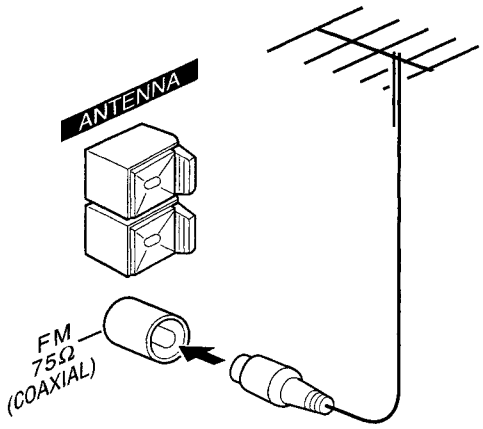


4 Connect the AC cord to an AC outlet.



CONNECTING AN OUTDOOR ANTENNA

For better FM reception, use of an outdoor antenna is recommended.
Connect the outdoor antenna to **FM 75 Ω** terminal.

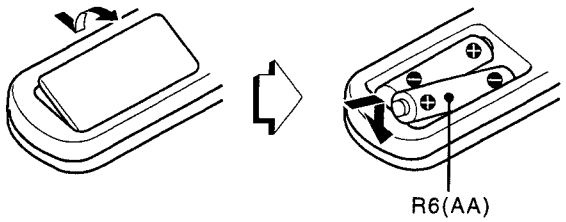


To connect other optional equipment → page 27.

REMOTE CONTROL

Inserting batteries

Detach the battery cover on the rear of the remote control and insert two R6 (size AA) batteries.



When to replace the batteries

The maximum operational distance between the remote control and the sensor on the main unit should be approximately 5 meters (16 feet). When this distance decreases, replace the batteries with new ones.

To use SHIFT on the remote control

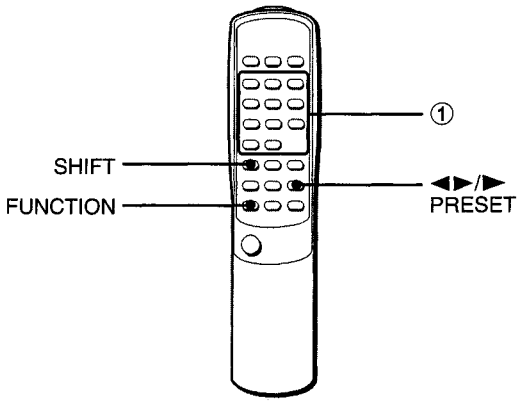
Buttons ① have two different functions. One of these functions is indicated on the button, and the other on the plate above the button.
To use the function on the button, simply press the button.
To use the function on the plate above the button, press the button while pressing **SHIFT**.

To use FUNCTION on the remote control

The **FUNCTION** substitutes for the function buttons (**TAPE DECK 1/2**, **TUNER**, **VIDEO/AUX**, **CD**, **MD**) on the main unit.
Each time **FUNCTION** is pressed, the next function is selected cyclically. When tapes are inserted in both decks, each deck is selected with **FUNCTION**.

◄►/► PRESET on the remote control

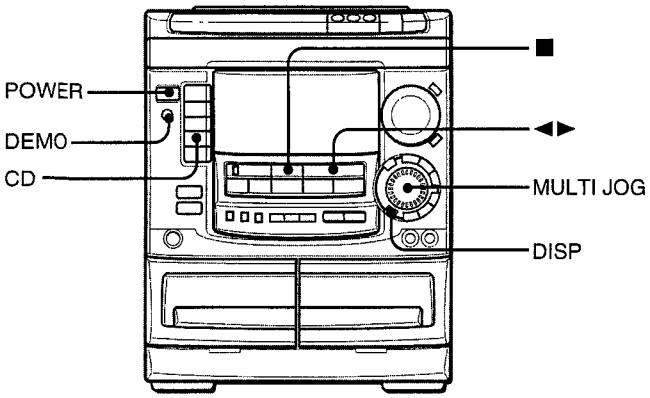
The function is the same as that of ◄► on the main unit.



NOTE

- If the remote control is not going to be used for an extended period of time, remove the batteries to prevent possible electrolyte leakage.
- The remote control may not operate correctly when:
  - The line of sight between the remote control and the remote sensor inside the display window is exposed to intense light, such as direct sunlight.
  - Other remote controls are used nearby (those of a television, etc.).

BEFORE OPERATION



To turn the power on

Press one of the function buttons (**TAPE**, **TUNER**, **VIDEO/AUX**, **CD**, **MD**). Playback of the inserted disc or tape begins, or the previously tuned station is received (Direct Play Function).
POWER is also available.
When the unit is turned on, the disc compartment may open and close to reset the unit.

To turn the power off

Press **POWER**.

Flash windows

The windows on the top of the unit and the cassette decks light up or flash while the unit is being powered on.
To turn off the light of the top window, press ■ while pressing **CD**. To turn back on, repeat the above.
The light of the cassette decks cannot be turned off.

To dim the illumination of the display

1 Press **DISP** twice so that "DIMMER" is displayed.
2 Within 4 seconds, turn **MULTI JOG** to select the dimmer mode as follows.

DIMMER 0 ⟷ DIMMER 1 ⟷ DIMMER 2 ⟷ DIMMER 3

DIMMER 0: The normal display.
DIMMER 1: The illumination of the display is dimmer than usual.
DIMMER 2: The illumination of the display is dimmer than DIMMER 1.
DIMMER 3: The illumination of the display is dimmer than DIMMER 2, and the spectrum analyzer and the illumination on the buttons light off.

Game Demo

When the AC cord is connected, the display window demonstrates the game Demo. When the power is turned on, the game Demo is overridden by the operation display. When the power is turned off, the game Demo is restored.

To cancel the game Demo
Press **DEMO**. To re-activate the game Demo, press **DEMO** again.

To play the game Demo

1 Press **DEMO** so that the game Demo displays.
2 Press ◄►.
Three numbers on the display start to run.
3 Press ■ once.
The number on the left side stops.
4 Press ■ twice to stop the remaining two numbers.

Scoring:
20 points are given to start the game.
If all the numbers are equal, 50 points are added to the score.
If not equal, one point is subtracted.
If the gained points reach 9999, you win.
If the gained points fall to 0, you lose.

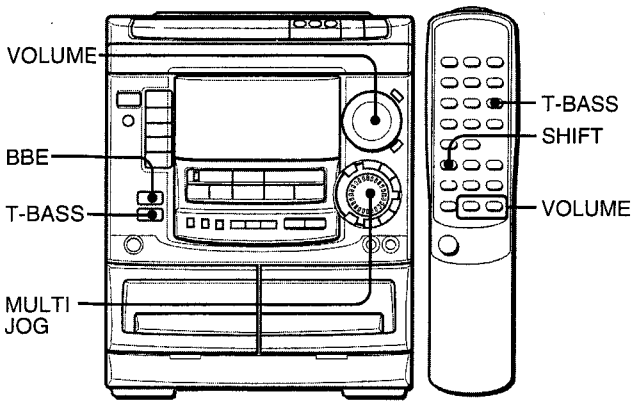
To reset the game Demo

Press **DEMO** twice, then press ◄►. The game starts again.

NOTE

- During playing the game Demo, ■ and ◄► are available only for the game Demo. Cancel the game Demo to use these buttons for the functions such as CD playing, etc.
- During the game Demo, some indicators unrelated with the actual operation light up on the display.

AUDIO ADJUSTMENTS

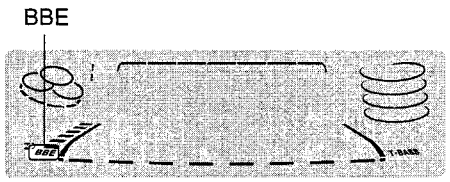


VOLUME

Turn VOLUME on the main unit, or press VOLUME on the remote control.
The volume level is displayed as a number from 0 to MAX (50). The volume level is automatically set to 20 when the power is turned off with the volume level set to 21 or more.

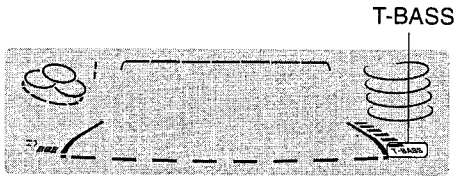
BBE SYSTEM

The BBE system enhances the clarity of high-frequency sound. It also enriches the Karaoke function to make your voice sound clear and pleasant.
Press BBE.
Each time it is pressed, the level changes. Select one of the three levels, or the off position to suit your preference.



SUPER T-BASS SYSTEM

The T-BASS system enhances the realism of low-frequency sound.
Press T-BASS.
Each time it is pressed, the level changes. Select one of the three levels, or the off position to suit your preference.



To select with the remote control
Press **T-BASS** while pressing **SHIFT**.

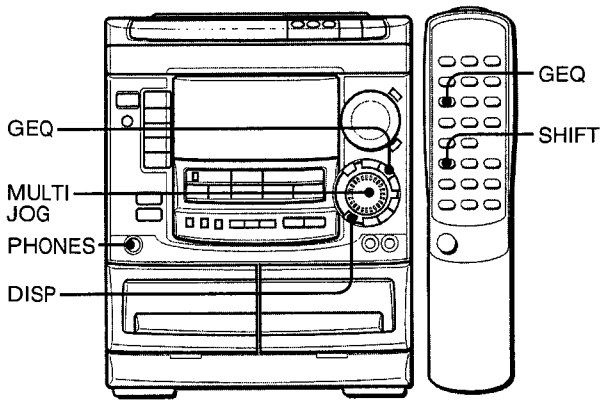
NOTE

- Low frequency sound may be distorted when the T-BASS system is used for a disc or tape in which low frequency sound is originally emphasized. In this case, cancel the T-BASS system.
- When playing back a tape recorded with BBE, it is recommended that BBE be set to off to avoid distorted high frequency sound.

GRAPHIC EQUALIZER

SELECTING THE PROGRAMMED EQUALIZATION CURVE

This unit provides the following 5 different programmed equalization curves.
ROCK: Powerful sound emphasizing treble and bass
POP: More presence in the vocals and midrange
JAZZ: Accented lower frequencies for jazz-type music
CLASSIC: Enriched sound with heavy bass and fine treble.
LATIN: Accented higher frequencies for latin music.



Press GEQ, and turn MULTI JOG to select one of the programmed equalization curve within 4 seconds.

"GRAPHIC EQUALIZER" lights up.

"GRAPHIC EQUALIZER" appears (except "GEQ OFF") and the GEQ mode is displayed cyclically as follows.

ROCK ↔ POP ↔ JAZZ ↔ CLASSIC ↔ LATIN
(Programmed mode)
GEQ OFF (cancel) ↔ M4 ↔ M3 ↔ M2 ↔ M1
(Manual mode)

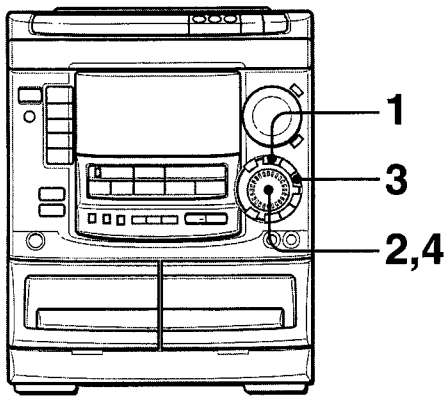
To display the current GEQ mode
Press **GEQ**. The current mode is displayed for 4 seconds.

To cancel the selected mode
Press **GEQ**, and turn **MULTI JOG** to select" GEQ OFF" within 4 seconds. "GRAPHIC EQUALIZER" disappears.

To select with the remote control
Press **GEQ** repeatedly while pressing **SHIFT**. The GEQ mode is displayed cyclically as above.

To change the spectrum analyzer display
3 patterns of spectrum analyzer display can be shown.
Press **DISP** once, and turn **MULTI JOG** within 4 seconds to select the desired spectrum analyzer display.

SETTING A NEW EQUALIZATION CURVE MANUALLY



The equalization curve can be customized to suit your preference.

1 **Press LOW.**
The lowest level frequency indicator flashes for 4 seconds.

2 **Within 4 seconds, turn MULTI JOG to adjust the level of the lowest frequency.**

3 **Press HIGH.**
The highest level frequency indicator flashes for 4 seconds.

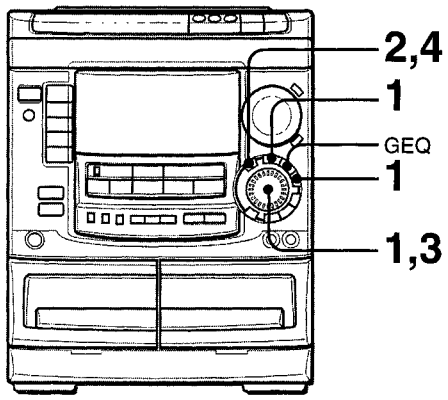
4 **Within 4 seconds, turn MULTI JOG to adjust the level of the highest frequency.**

The frequency level indicators of between the lowest and the highest are adjusted accordingly.

Using the headphones
Connect headphones to the **PHONES** jack with a standard stereo plug (ø6.3 mm, 1/4 inch).
No sound is output from the speakers while the headphones are plugged in.

Sound adjustment during recording
The output volume and tone (except BBE) of the speakers or headphones may be freely varied without affecting the recording.

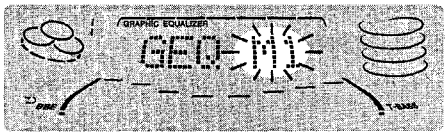
MEMORIZING THE NEW EQUALIZATION CURVES



Up to 4 customized equalization curves can be stored as the manual modes M1 - M4.

***1* Set a new equalization curve with HIGH, LOW, and MULTI JOG.**
See "SETTING A NEW EQUALIZATION CURVE MANUALLY".
The created curve is displayed for 4 seconds.

***2* Within 4 seconds, press ENTER.**
"M 1" flashes on the display for 4 seconds.



- If this step is not completed within 4 seconds, press **GEQ** first to display "GEQ ON". Then press **ENTER** within 4 seconds.

***3* Within 4 seconds, turn MULTI JOG to select one of the manual modes M1 - M4 to store the curve.**

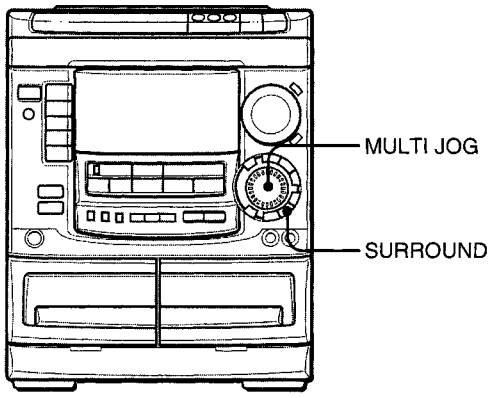
***4* Within 4 seconds, press ENTER.**
The new equalization curve is stored.

To select the stored equalization curve
Press **GEQ**, and turn **MULTI JOG** to select one of the manual modes M1 - M4 within 4 seconds.

DSP SURROUND

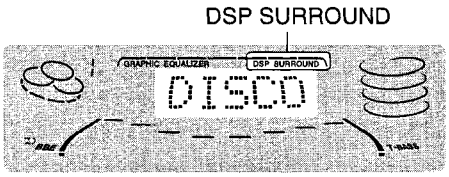
The DSP (Digital Signal Processor) SURROUND adjusts the delay time, the input mode and the feedback level to give a resonant surround sound, allowing you to enjoy the real sound presence of different environments.
This unit has been programmed with 4 different SURROUND modes. You can also create and memorize up to 4 of your own surround settings.

SELECTING A PROGRAMMED DSP SURROUND MODE

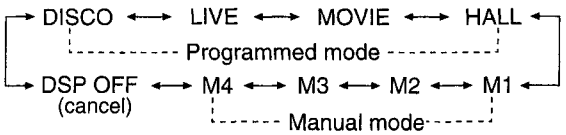


When you select the programmed DSP SURROUND mode, the sound presence of a disco (DISCO), live music performance (LIVE), movie theatre (MOVIE) or concert hall (HALL) can be obtained.

Press SURROUND, and turn MULTI JOG to select the desired programmed mode within 4 seconds.



"DSP SURROUND" appears and the DSP SURROUND mode is displayed cyclically as follows.



Equalization curves are selected automatically to match the DSP SURROUND modes and can also be selected or turned off to suit your preference.

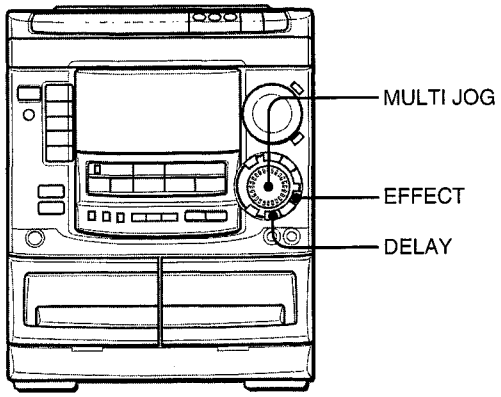
To display the current DSP SURROUND mode
Press **SURROUND**. The current mode is displayed for 4 seconds.

To cancel the selected mode
Press **SURROUND**, and turn **MULTI JOG** to select "DSP OFF" within 4 seconds. "DSP SURROUND" disappears.

When the music source is monaural
Select "LIVE" or "MOVIE" to obtain a simulated stereo effect.
When "DISCO" or "HALL" is selected, no sound will be heard from the surround speakers.

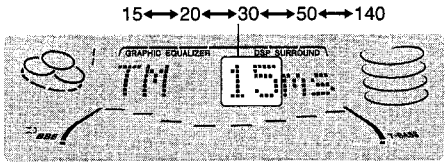
SETTING A NEW DSP SURROUND SOUND MANUALLY

The elements of the DSP SURROUND sound can be customized.



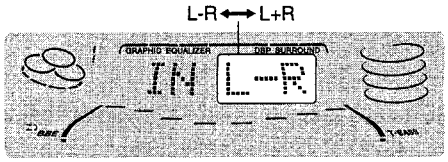
DELAY (delay time)
Increasing the number in the display increases the delay time and surround effect. "15", " 20", "30", "50" or "140" mSec can be selected.

To adjust the delay time
Press **DELAY**, and turn **MULTI JOG** to select one of the levels within 4 seconds.



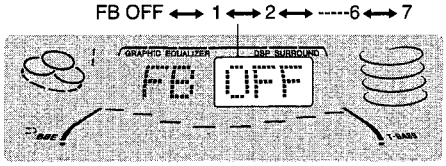
L-R, L+R (input mode)
When "L+R" is displayed, the surround effect increases, especially in the centre.
When "L-R" is displayed, it increases on the outside.

To select a input mode
Press **EFFECT** once, and turn **MULTI JOG** to select "L-R" or "L+R" within 4 seconds.



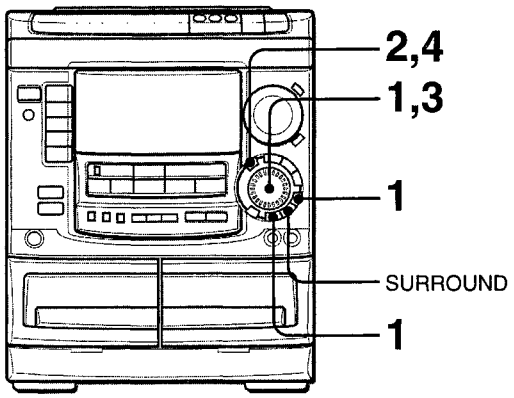
FB (feedback level)
Increasing the number in the display increases the echo.
A level from "OFF" (0) to "7" can be selected.

To adjust the level of feedback
Press **EFFECT** twice, and turn **MULTI JOG** to select one of the levels within 4 seconds.



MEMORIZING THE NEW DSP SURROUND SOUND

Up to 4 DSP SURROUND sound can be memorized as the manual modes M1 - M4.



1 **Set a new DSP SURROUND sound with DELAY, EFFECT, and MULTI JOG.**

2 **Within 4 seconds, press ENTER.**
"M1" flashes on the display.

- If this step is not completed within 4 seconds, press **SURROUND** first to display "DSP ON". Then press **ENTER** within 4 seconds.

3 **Within 4 seconds, turn MULTI JOG to select one of the manual modes M1 - M4.**

4 **Within 4 seconds, press ENTER.**
The new DSP SURROUND sound is memorized.

To select the stored DSP SURROUND sound
Press **SURROUND**, and turn **MULTI JOG** to select one of the manual modes M1 - M4 within 4 seconds.

NOTE
When the MIC or ECHO level is changed (page 23), the SURROUND mode is automatically cancelled.

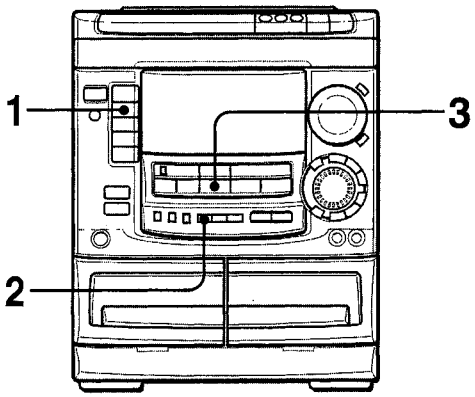
PRESETTING STATIONS

The unit can store a total of 32 preset stations. Presetting allows you to tune in to a station directly. Stations are assigned preset numbers, beginning from 1 in consecutive order for each band (FM, MW, LW).

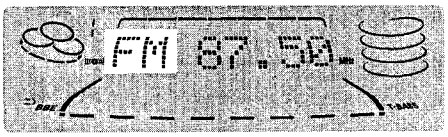
Automatic presetting:
This unit has a function for reception of *1RDS (Radio Data System) and other stations.
FM RDS stations take priority over other FM stations if there are more than 32 receivable stations.
Manual presetting:
You can select stations to be preset from all the bands.

AUTOMATIC PRESETTING

The tuner scans through the receivable frequency range and stores stations automatically.

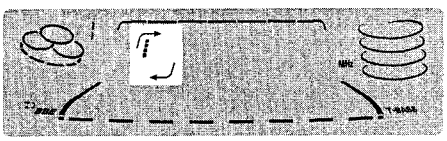


1 Press TUNER BAND.
FM is displayed.



2 Keep RT pressed for 4 seconds until AUTO PRESET is displayed.
II SET flashes for 4 seconds.

3 Press II SET while II flashes.
The tuner searches for a station, beginning with the FM band. When a tuned station is stored, the selected preset number flashes on the display.

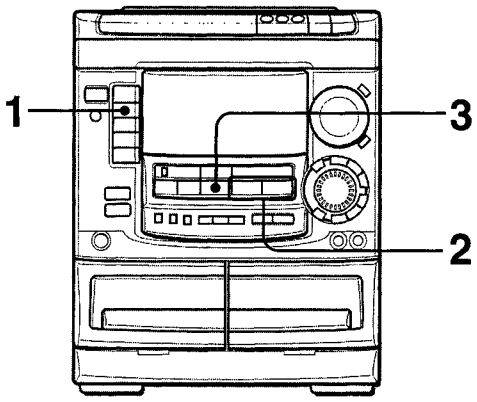


The search continues on the MW and LW bands if preset numbers are still available.
When automatic presetting has been completed, the display returns to the first preset station.

When the tuner detects *2identical RDS stations with alternative frequencies
Only the station with the stronger signal is stored.
Before storing an RDS station, the tuner checks first whether the same stations on the other frequencies are present, and stores the station with the best reception.

NOTE
When automatic presetting is done, all previously stored stations are cleared.

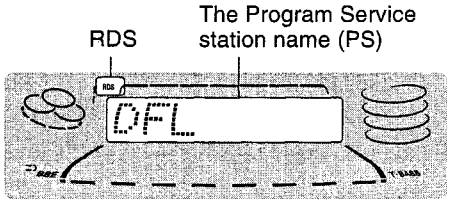
MANUAL PRESETTING



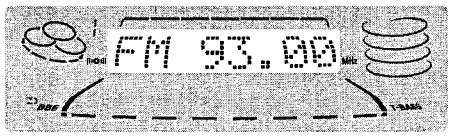
1 Press TUNER BAND repeatedly to select the band.

FM → MW → LW

2 Press ◄◄ DOWN or ►► UP to select a station.
Each time the button is pressed, the frequency changes.
ⓐ When tuning in to an FM RDS station
After TUNE on the display goes out, the Program Service station name (*3PS) is displayed and RDS lights up.



ⓑ When tuning in to the other stations
After TUNE on the display goes out, the band is displayed.



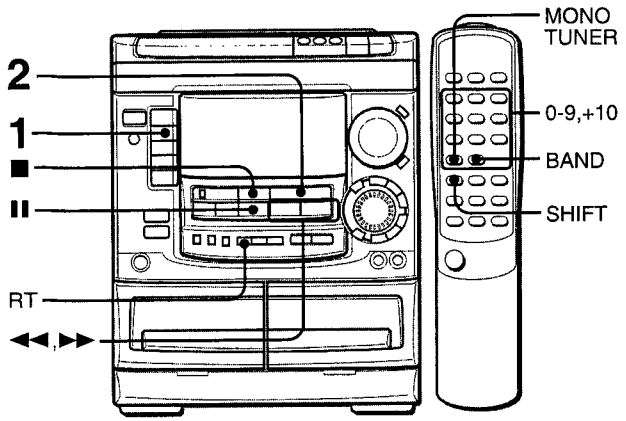
• During FM stereo reception, ((◉)) lights.

3 Press II SET to store the station.
The selected preset number flashes.

4 Repeat steps 1 to 3 to store the stations.
The next station will not be stored if a total of 32 preset stations for all the bands have already been stored.

To search for a station quickly with ◄◄ DOWN or ►► UP (Auto Search)
Keep one of the buttons pressed until the tuner starts searching for a station. The search stops when the tuner tunes in to a station.
To stop the Auto Search manually, press one of the buttons.
• The Auto Search may not stop at stations with very weak signals.

RECEPTION BY PRESET NUMBER



1 Press TUNER BAND to select a band.

2 Press ◄► PRESET repeatedly.
Each time the button is pressed, the next highest number is selected.

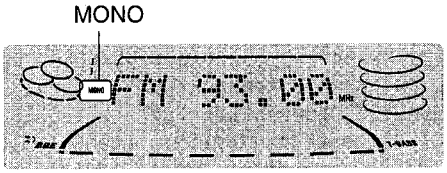
Selecting a preset number on the remote control
Press **BAND** while pressing **SHIFT** to select a band. Then, press the numbered buttons to select a preset number.
Example:
To select preset number 20, press **+10**, **+10** and **0**.
To select preset number 15, press **+10** and **5**.

To clear a preset station
Select the preset number of the station to be cleared. Then, press **■ CLEAR**, and press **II SET** within 4 seconds.
The preset numbers of all stations in the band with higher numbers are also decreased by one.

To tune in to a station which is not preset
Press **TUNER BAND** to select a band, and press **◄◄ DOWN** or **►► UP** to select the station.

To play a tuned station when the power is off (Direct Play Function)
Press **TUNER BAND**. The power is turned on and the tuned station is played.

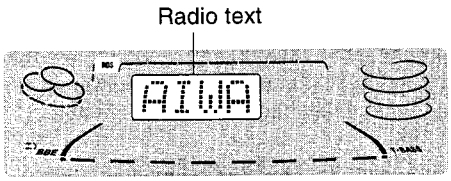
When an FM stereo broadcast contains noise
Press **MONO TUNER** while pressing **SHIFT** on the remote control to display MONO.



Noise is reduced, although reception is monaural.
To restore stereo reception, press these buttons so that the MONO indicator goes out.

NOTE
RDS functions may not work correctly if the RDS transmission data from the station contains too much interference or the reception signal is too weak.

To display radio text (*4RT) during RDS reception
When the tuned station is transmitting RT codes, text appears on the display.
If the tuned station is not transmitting RT codes, "NO RT" is displayed.



To return to the normal display, press **RT** again.

***1RDS**
Today many stations transmit so-called RDS (Radio Data System) codes that contain a variety of additional information along with regular sound signals.

***2Identical RDS stations with alternative frequencies (AF)**
This is a list of alternative frequencies that gives information on the various transmitters broadcasting the same program in the same reception area. It enables receivers equipped with memory to store the list, to reduce the time needed for switching to another transmitter.

***3Program service station name (PS)**
This is a name consisting of not more than 8 alphanumeric characters, which is displayed in order to inform listeners about the program service being broadcast by the radio station.
Example: BBC 1
Characters which can be displayed

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
0 1 2 3 4 5 6 7 8 9 < > ? " ' ⌘ @ ⌐ _ ¡ − + /

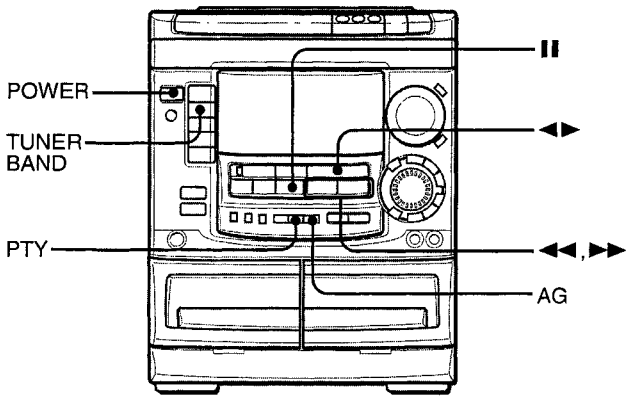
If a character transmitted by the broadcast is not applicable to receivers, a blank space is inserted.

***4Radiotext (RT)**
Information such as the cast list of a play or the title of a song is shown on the display.

En

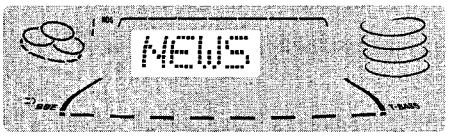
SEARCHING WITH THE HELP OF RDS CODES

Each RDS station identifies the type of program (*5PTY) which it is currently broadcasting. If you specify a PTY, the unit can automatically detect a suitable station from the preset stations. In addition, the *6EON (Enhanced Other Networks) service works in some areas, so that searching is much faster.



TO DISPLAY THE PTY

Press PTY once during RDS reception.



Programs are classified as follows:

TRAFFIC, NEWS, AFFAIRS (current affairs), INFO (information), SPORT, EDUCATE (education), DRAMA, CULTURE, SCIENCE, VARIED, POP M (pop music), ROCK M (rock music), M.O.R.M. (middle of the road music), LIGHT M. (light classical), CLASSICS (serious classical), OTHER M (other music), WEATHER, FINANCE, CHILDREN (Children's programmes), SOCIAL A (Social Affairs), RELIGION, PHONE IN, TRAVEL, HOBBIES, JAZZ (Jazz Music), COUNTRY (Country Music), NATION M (National Music), OLDIES (Oldies Music), FOLK M (Folk Music), DOCUMENT (Documentary), TEST (Alarm Test), ALARM !

NOTE

- If program type information is not being transmitted, NO PTY is displayed.
- If undefined program type information is being transmitted, UNDEFINE is displayed.
- The unit identifies TRAFFIC with one of the program types.

TO SEARCH FOR A SPECIFIED PTY

1 **Press PTY.**
The program type of the currently tuned station is displayed.

2 **Within 4 seconds, press ◄◄ DOWN or ►► UP to select a program type.**

3 **Within 4 seconds, press PTY again.**
The search automatically checks every preset station. After identifying a suitable station, the station will be selected.

EON service for the PTY search
When EON service works to transmit PTY, a suitable station is detected without checking every preset station. When a station transmits EON information, it takes about 15 to 30 seconds for the unit to decode the EON information. After decoding the information, EON lights up on the display.

When a station is not found
NOT FOUND is displayed and the unit returns to the previous station.

When the TRAFFIC program type is selected
The unit searches for a station transmitting a *7TP code. However, the tuned station may not be broadcasting a traffic announcement currently. Wait for a while. The tuned station broadcasts traffic information regularly and a traffic announcement will be made.

EON SEARCH

During FM reception, the unit switches to radio programs with the specified PTY automatically as soon as they begin.

1 **Press PTY.**
The program type of the currently tuned station is displayed.

2 **Within 4 seconds, press ◄◄ or ►► to select a program type.**

3 **Within 4 seconds, press II SET.**
"EON ON" is displayed for 3 seconds. Then, "EON" starts flashing and the unit enters EON search standby mode.
When radio program with the specified PTY in another radio station begins, it interrupts the currently playing radio program and the radio program with the specified PTY is heard. At this time, "EON" flashes rapidly.
At the end of the radio program with the specified PTY, the previous FM radio station is restored.
- EON search standby mode is stored until it is cancelled even if the power is turned off.

To restore the previous FM station during reception of the radio program with the specified PTY
Press **◄► DIRECTION/PRESET.**
At this time, EON search standby mode is cancelled.

To cancel EON search standby mode
Keep **PTY** pressed. (Do not release **PTY** yet.) "EON PTY" and the specified PTY are displayed alternately. At this time, press **II SET** with pressing **PTY**. "EON OFF" is displayed and EON search standby mode is cancelled.

NOTE

The EON search function does not work when:
- FM stations are not preset.
- The signals of stations with the specified PTY are weak.

OTHER FUNCTION OF RDS CODES

Auto GEQ function

The equalization curve is switched automatically to match the music program type of an RDS station.

Press AG.

AG lights up.

To cancel, press it again.

GEQ matching PTY:

PTY	GEQ
POP M	POP
ROCK M	ROCK
LIGHT M	JAZZ
CLASSICS	CLASSIC
JAZZ	JAZZ
COUNTRY	POP
NATION M	POP
OLDIES	POP
FOLK M	JAZZ
Others	off

The selected GEQ can be changed to suit your preference by pressing **GEQ**. During this time, the Auto GEQ function is cancelled.

Clock-time (*8CT)

The CT function provides the unit with information about the local time. The CT function works whenever a CT station is received.

If you have not set the clock (the clock flashes on the display)

The current time can be set automatically by tuning in to an RDS station.

If no RDS station is preset, keep ◄◄ **DOWN** or ►► **UP** pressed until RDS lights up.

If the clock does not agree with the broadcast time

An RDS signal will update the clock time on the hour every hour.

***5Program type identification (PTY)**

PTY allows selection of listening by one of 15 or more program types rather than by a station.

***6Enhanced other networks information (EON)**

EON information gives the receiver a cross reference to other stations and allows the receiver to switch from the currently tuned station to another RDS station.

***7Traffic program identification (TP)**

This is a code which informs the receiver that a tuned station regularly broadcasts traffic information.

***8Clock-time (CT)**

CT function provides an accurate clock signal which is self adjusting to time zones and seasonal time changes.

To change the MW tuning interval

The default setting of the MW tuning interval is 9 kHz/step. If you use the unit in an area where the frequency allocation system is 10 kHz/step, change the tuning interval as follows.

Press **POWER** while pressing **TUNER BAND**.

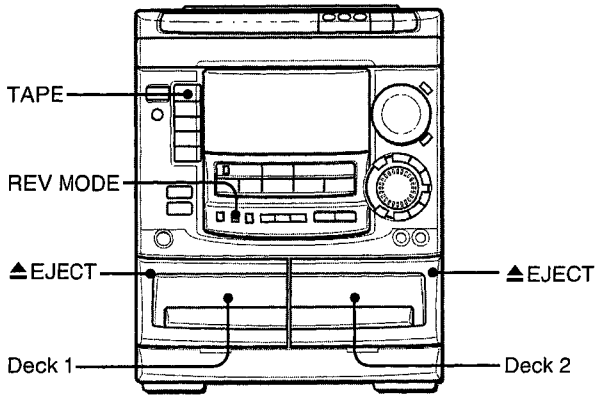
To reset the interval, repeat this procedure.

NOTE

When the MW tuning interval is changed, all preset stations are cleared. The preset stations have to be set again.

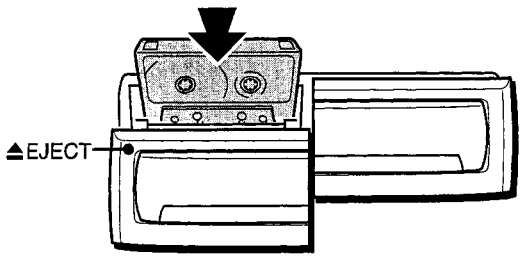
BASIC OPERATIONS

INSERTING TAPES



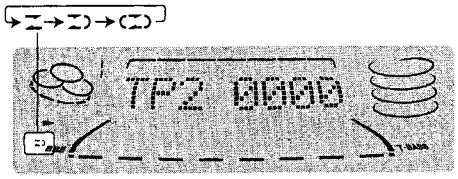
- On deck 1, tapes are always played back on both sides. On deck 2, you can select a reverse mode to play back one or both sides.
- Use Type I (normal), Type II (high/CrO_2) or Type IV (metal) tapes for playback.

Press TAPE and press ⏏ EJECT to open the cassette holder.



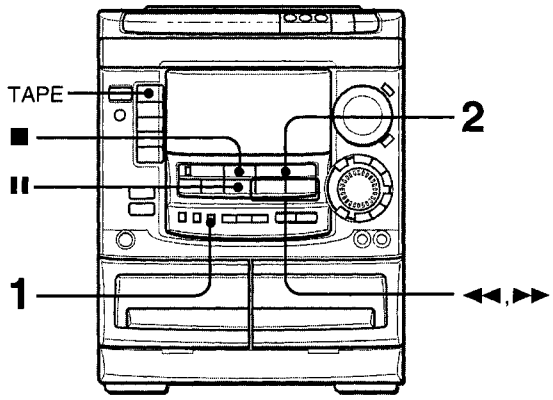
Insert a tape with the exposed side down. Push the cassette holder to close.

To select a reverse mode (deck 2 only)
Each time **REV MODE** is pressed, the reverse mode changes.



To play one side only, select ⇉.
To play from front side to reverse side once only, select ⇉).
To play both sides repeatedly, select (⇉).
- When tapes are loaded in both decks, ⇉) on the display indicates Continuous Play.

PLAYING BACK A TAPE

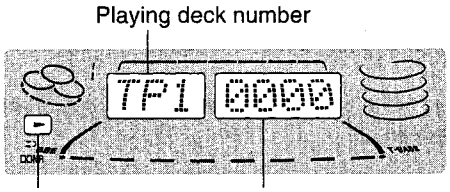


Insert a tape.

***1* Press DOLBY NR and turn Dolby NR on or off to match the playback tape.**

For tapes recorded with DOLBY NR, turn on DD NR.
For tapes recorded without DOLBY NR, turn off DD NR.

***2* Press ◀▶ to start play.**



▶: The front side is being played (forward).
◀: The back side is being played (reverse).

When tapes are loaded in both decks
Press **TAPE** first to select a deck.
The selected deck number is displayed.

To stop play, press ■.
To pause play (deck 2 only), press II. To resume play, press again.
To change the playback side, press ◀▶ **DIRECTION/PRESET** in play or pause mode.
To fast forward or rewind, press ◀◀ or ▶▶. Then press ■ to stop the tape.

To start play when the power is off (Direct Play Function)
Press **TAPE**. The power is turned on and play of the inserted tape begins.

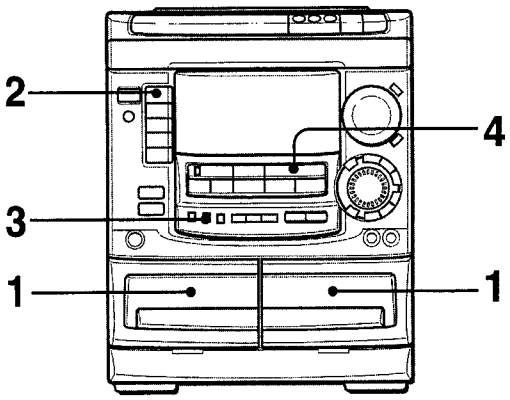
To set the tape counter to 0000
Press ■ **CLEAR** in stop mode.
The counter is also set to 0000 when the cassette holder is opened and closed.

MUSIC SENSOR

If there is a 4-second or longer blank between each track, a search for the beginning of the current or next track during playback can be done easily.
Press ◄◄ or ►► during playback referring to the playback side indicator (◄ or ►) on the display.
For example, when ►► is pressed while ► is displayed, playback of the next track starts.

Music sensor function may not be able to detect tracks under the following conditions:
- Blanks of less than 4 seconds between tracks
- Noisy blanks
- Long passages of low-end sound
- Low overall recording levels

CONTINUOUS PLAY



After playback on one deck finishes, the tape in the other deck will start to play without interruption.

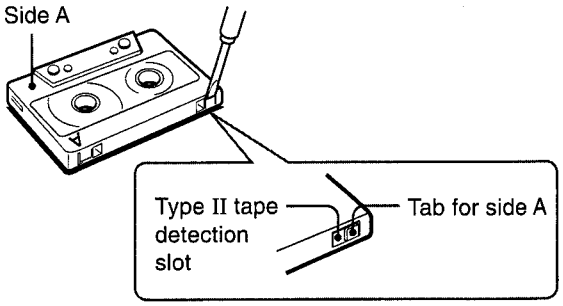
1 **Insert tapes into deck 1 and deck 2.**

2 **Press TAPE DECK1/2 to select the deck to be played back first.**

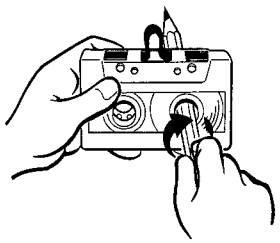
3 **Press REV MODE to select ⇄.**

4 **Press ◄► to start playback.**
Playback continues until ■ is pressed.

About cassette tapes
- **To prevent accidental erasure**, break off the plastic tabs on the cassette tape after recording with a screwdriver or other pointed tool.



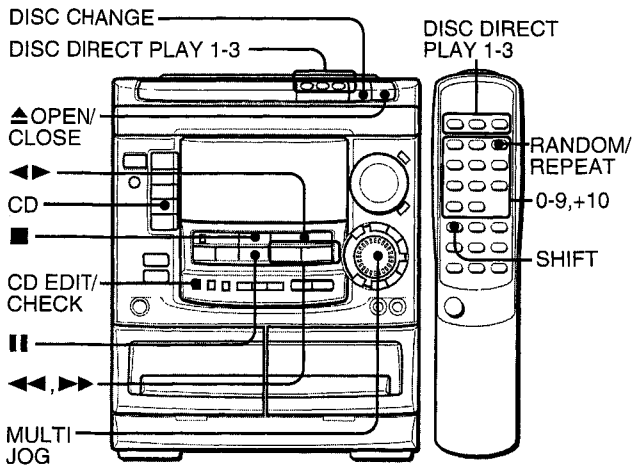
To record on the tape again, cover the tab openings with adhesive tape, etc. (On Type II tapes, take care not to cover the Type II tape detection slot.)
- **120-minute or longer tapes** are extremely thin and easily deformed or damaged. They are not recommended.
- **Take up any slack in** the tape with a pencil or similar tool before use. Slack tape may break or jam in the mechanism.



DOLBY NR system
The Dolby Noise Reduction system reduces tape hiss noise. For optimum performance when playing back a tape recorded with the DOLBY NR system, turn on the DOLBY NR system.

En

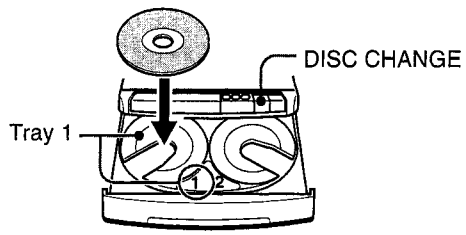
BASIC OPERATIONS

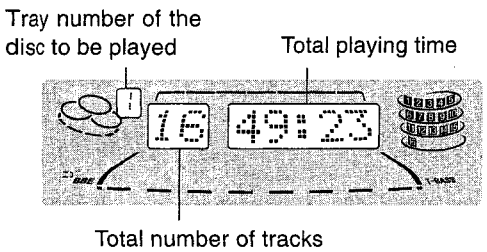


LOADING DISCS

Press CD, then press ▲ OPEN/CLOSE to open the disc compartment. Load disc(s) with the label side up.

To play one or two discs, place the discs on tray 1 and 2.
To play three discs, press **DISC CHANGE** to rotate the trays after placing two discs. Place the third disc on tray 3.
Close the disc compartment by pressing **▲ OPEN/CLOSE**.

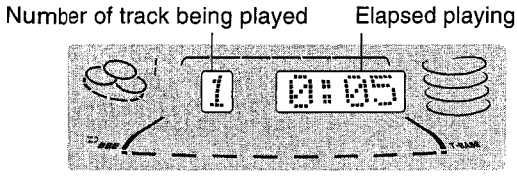




PLAYING DISCS

Load discs.

To play all discs in the disc compartment, press ◄►.
Play begins with the disc on tray 1.



To play one disc only, press DISC DIRECT PLAY 1-3.
The selected disc is played once.

To stop play, press ■.
To pause play, press II. To resume play, press again.
To search for a particular point during playback, keep ◄◄ or ►► pressed and release it at the desired point.
To skip to the beginning of a track during playback, press ◄◄ or ►► repeatedly or turn **MULTI JOG**.
To remove discs, press **▲ OPEN/CLOSE**.

To start play when the power is off (Direct Play Function)

Press **CD**. The power is turned on and play of the loaded disc(s) begins.
When **▲ OPEN/CLOSE** is pressed, the power is also turned on and the disc compartment is opened.

To check the remaining time

During play, press **CD EDIT/CHECK**. The amount of time remaining until all tracks finish playing is displayed. To restore the playing time display, repeat the above.

Selecting a track with the remote control

1 Press **DISC DIRECT PLAY 1-3** to select a disc.
2 Press numbered buttons **0-9** and **+10** to select a track.
Example:
To select the 25th track, press **+10**, **+10** and **5**.
To select the 10th track, press **+10** and **0**.
The selected track starts to play and continues to the end of that disc.

Replacing discs during play

While one disc is playing, the other discs can be replaced without interrupting play.
1 Press **DISC CHANGE**.
2 Remove the discs and replace with other discs.
3 Press **▲ OPEN/CLOSE** to close the disc compartment.

NOTE

- When loading an 8-cm (3-inch) disc, put it onto the inner circle of the tray.
- Do not place more than one compact disc on one disc tray.
- Do not tilt the unit with discs loaded. Doing so may cause malfunctions.
- Do not use irregular shape CDs (example: heart-shaped, octagonal ones). It may result in malfunctions.

RANDOM /REPEAT PLAY

Use the remote control.

RANDOM play
All the tracks on the selected disc or all the discs can be played randomly.

REPEAT play
A single disc or all the discs can be played repeatedly.

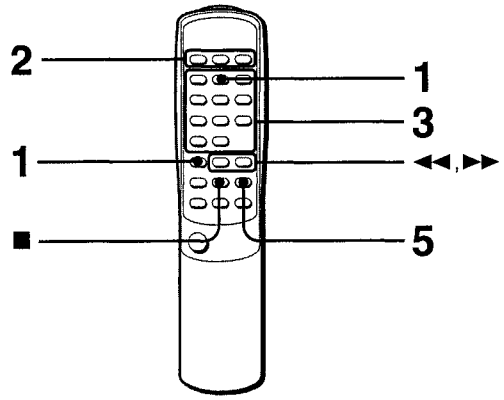
Press RANDOM/REPEAT while pressing SHIFT .
Each time it is pressed, the function can be selected cyclically.
RANDOM play — RANDOM lights up on the display.
REPEAT play — ↻ lights up on the display.
RANDOM/REPEAT play — RANDOM and ↻ light up on the display.
Cancel — RANDOM and ↻ disappear from the display.

To play all discs, press ◄► to start play.
To play a single disc, press one of **DISC DIRECT PLAY 1-3** to start play.

NOTE
During random play it is not possible to skip to the previously played track with ◄◄.

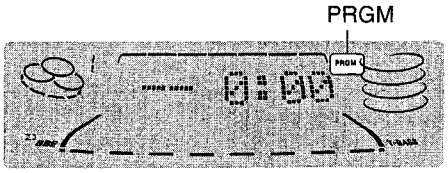
PROGRAMMED PLAY

Up to 30 tracks can be programmed from any of the inserted discs.



Use the remote control.

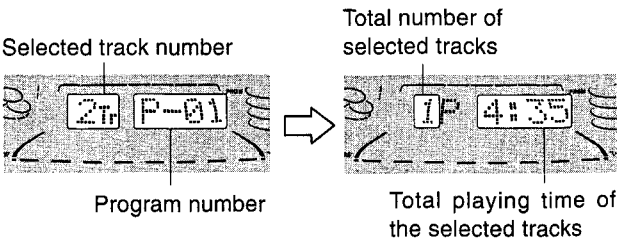
***1* Press PRGM twice while pressing SHIFT in stop mode.**
"PRGM" is displayed .



- When **PRGM** is pressed once in step 1, the unit enters the KARAOKE PROGRAM (page 24).

***2* Press DISC DIRECT PLAY 1-3 to select a disc.**
Go to the next step when the tray stops rotating.

***3* Press numbered buttons 0-9 and +10 to program a track.**
Example:
To select the 25th track, press **+10**, **+10** and **5**.
To select the 10th track, press **+10** and **0**.



***4* Repeat steps 2 and 3 to program other tracks.**

***5* Press ◄► to start play.**

To check the program
Each time ◄◄ or ►► is pressed in stop mode, a disc number, track number, and program number will be displayed.

To clear the program
Press ■ **CLEAR** in stop mode.

To add tracks to the program
Repeat steps 2 and 3 in stop mode. The track will be programmed after the last track.

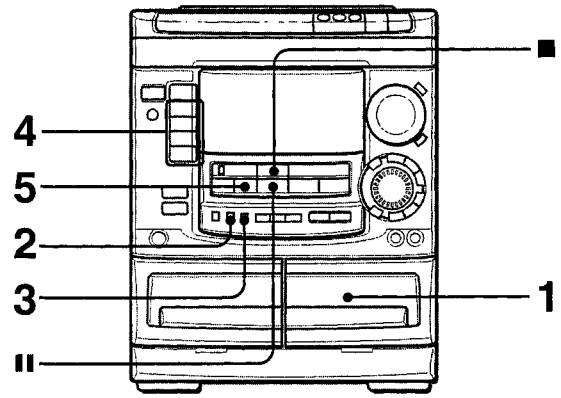
To change the programmed tracks
Clear the program and repeat all the steps again.

To play the programmed tracks repeatedly
After programming the tracks, press **RANDOM/REPEAT** repeatedly while pressing **SHIFT** until ↻ appears on the display.

NOTE
During programmed play, you cannot perform random play, checking the remaining time, and selecting a disc or track.

BASIC RECORDING

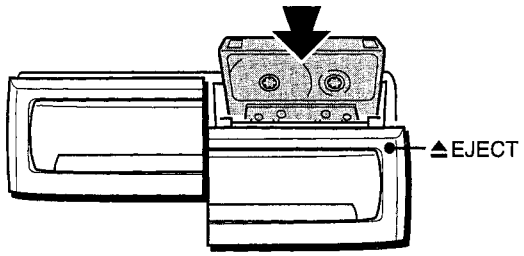
This section explains how to record from the tuner, CD player, or external equipment.



Preparation
- Use Type I (normal) and Type II (high/CrO_2) tapes for recording.
- Set the tape to the point where recording will start.

1 Insert the tape to be recorded on into deck 2.

Insert the tape with the side to be recorded on first facing out from the unit.



2 Press REV MODE to select the reverse mode.

To record on one side only, select ⇄.
To record on both sides, select ⇄ or (⇄).

3 Press DOLBY NR to turn Dolby NR on or off.

To record with DOLBY NR, turn on DD NR.
To record without DOLBY NR, turn off DD NR.

4 Press one of the function buttons (CD, TUNER, VIDEO/AUX or MD) and prepare the source to be recorded.

To record from a CD, press **CD** and load the disc(s).
To record from a radio broadcast, press **TUNER** and tune in to a station.
To record from a connected source, press **VIDEO/AUX** or **MD**.

5 Press ● REC/REC MUTE to start recording.

When the selected function is CD, playback and recording start simultaneously.

To stop recording, press ■.
To pause recording, press **II**. (Applicable when the source is TUNER, VIDEO/AUX or MD) To resume recording, press it again.

Sound adjustment during recording
The output volume and tone (except BBE) of the speakers or headphones may be freely varied without affecting the recording.

INSERTING BLANK SPACES

Insertion of 4-second blank spaces enables you to activate the Music Sensor function. (Applicable when the source is TUNER, VIDEO/AUX or MD.)

1 **Press ● REC/REC MUTE during recording or while in recording pause mode.**
REC on the display flashes for 4 seconds and the tape runs without recording. After 4 seconds, the deck enters the recording pause mode.
2 **Press II to resume recording.**

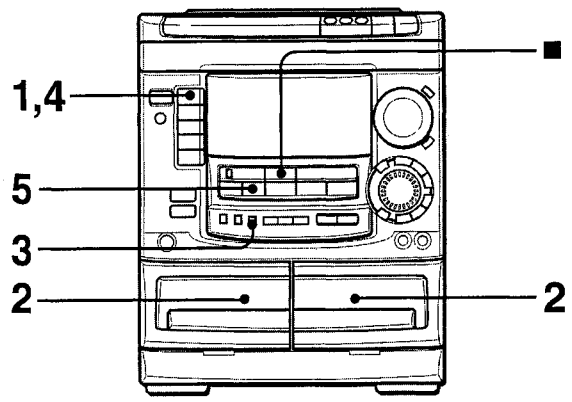
To insert a blank space of less than 4 seconds, press ● **REC/REC MUTE** again while REC is flashing.
To insert blank spaces of more than 4 seconds, after the deck enters recording pause mode, press ● **REC/REC MUTE** again. Each time the button is pressed, a 4-second blank space is added.

NOTE

If squealing or beating sounds occur when recording an MW or LW broadcast, press **MONO TUNER** on the remote control while pressing **SHIFT** until "BEAT 1" or "BEAT 2" is displayed, so as to eliminate the noise.

To erase a recording
Make sure the microphone is not connected to this unit.
Set the microphone volume and the echo level to OFF (see page 23).
1 Insert the tape to be erased into deck 2 and press **TAPE DECK 1/2** to display "TP 2".
2 Set the tape to the point where the erasure is to be started.
3 Set the reverse mode by pressing **REV MODE**.
4 Press ● **REC/REC MUTE** to start the erasure.

DUBBING A TAPE MANUALLY



NOTE

- Set the tape to the point where recording will start.
- The reverse mode is automatically set to ⇄.
  Note that recording will be done on one side of the tape only.

***1* Press TAPE.**

***2* Insert the original tape into deck 1 and the tape to be recorded on into deck 2.**
Insert the tapes with the sides to be played back or recorded on facing out from the unit.

***3* Press DOLBY NR to turn off the Dolby NR.**
DD NR on the display goes out.

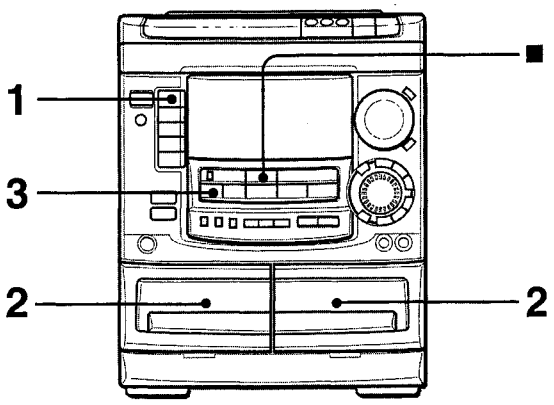
***4* Press TAPE DECK 1/2 to select deck 1.**
"TP 1" is displayed.

***5* Press ● REC/REC MUTE to start recording.**
Playing and recording start simultaneously.

To stop dubbing
Press ■.

To set the Dolby NR when playing back the dubbed tape
Press **DOLBY NR** and turn Dolby NR on or off to match the original tape.

DUBBING THE WHOLE TAPE



This function allows you to make exact copies of both sides of the original tape. The reverse side of both tapes will start simultaneously as soon as the longer tape has been reversed.

NOTE

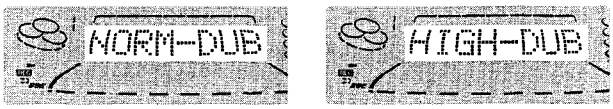
- Dubbing does not start from a point halfway in the tape.
- The reverse mode is automatically set to ⇉.
- The Dolby NR does not affect recording.

***1* Press TAPE.**

***2* Insert the original tape into deck 1 and the tape to be recorded on into deck 2.**
Insert each tape with the side to be played back or recorded on facing out from the unit.

***3* Press SYNC DUB once or twice to start recording.**
① **For recording at normal speed**, press it once to display NORM-DUB.
② **For recording at high speed**, press it twice to display HIGH-DUB.

① ②



The tapes are rewound to the beginning of the front sides, and recording starts.

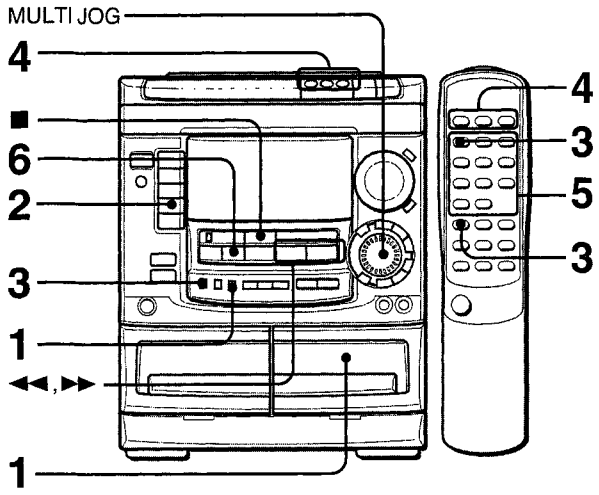
To stop dubbing
Press ■.

To set the Dolby NR when playing back the dubbed tape
Press **DOLBY NR** and turn Dolby NR on or off to match the original tape.

NOTE

Recording does not start, if the erasure prevention tab on either side of the tape is broken off.

AI EDIT RECORDING



The AI edit recording function enables CD recording without worrying about tape length and track length. When a CD is inserted, the unit automatically calculates the total track length. If necessary, the order of tracks is rearranged so that no track is cut short.
(AI: Artificial Intelligence)

NOTE

AI edit recording will not start from a point halfway into the tape. The tape must be recorded from the beginning of either side.

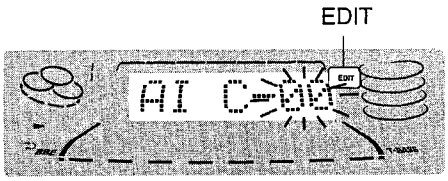
***1* Insert the tape into deck 2, and press DOLBY NR to turn Dolby NR on or off.**

Insert the tape with the side to be recorded on first facing out from the unit.

***2* Press CD and load the disc(s).**

***3* Press CD EDIT/CHECK once.**

"EDIT" is displayed.



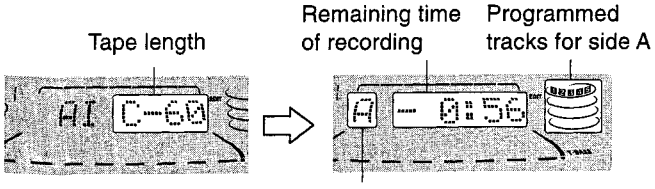
- When "PRGM" is displayed, press **CD EDIT/CHECK** again.

***4* Press DISC DIRECT PLAY 1-3 to select a disc.**

***5* Press numbered buttons 0-9 on the remote control to designate the tape length.**

10 to 99 minutes can be specified.
Example: When using a 60-minute tape, press **6** and **0**.
In a few seconds, the tracks to be recorded on each side of the tape are determined.

- ◄◄, ►► or **MULTI JOG** are also available to designate the tape length.



Tape side
A: First recording side
B: Second recording side

***6* Press ● REC/REC MUTE to start recording on the first side.**

The tape is rewound to the beginning of the front side, the lead segment is played through for 10 seconds, and recording starts. When recording on the front (side A) ends, recording on the back (side B) starts.

To stop recording

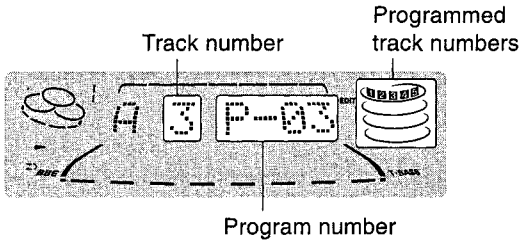
Press ■ **CLEAR**. Recording and CD play stop simultaneously.

To clear the edit program

Press ■ **CLEAR** twice so that "EDIT" disappears on the display.

To check the order of the programmed track numbers

Before recording, press **CD EDIT/CHECK** to select side A or B, and press ◄◄ or ►► repeatedly.



To add tracks from other discs to the edit program

If there is any time remaining on the tape after step 5, you can add tracks from other discs in the CD compartment .

1 Press **CD EDIT/CHECK** to select side A or B.
2 Press **DISC DIRECT PLAY 1-3** to select a disc.
3 Press numbered buttons on the remote control to select tracks. A track whose playing time is longer than the remaining time cannot be programmed.
4 Repeat steps 2 and 3 to add more tracks.

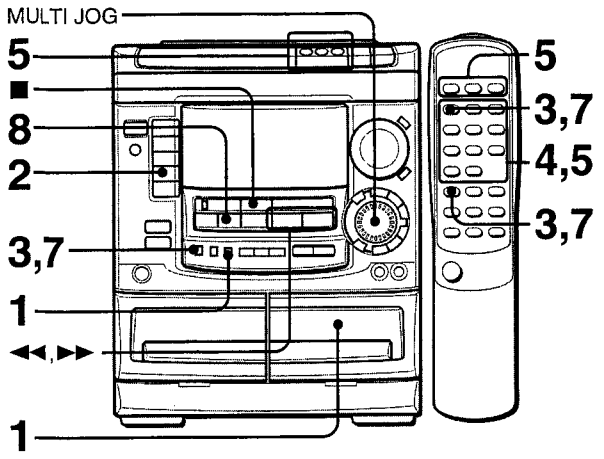
Time on cassette tapes and editing time

The actual cassette recording time is usually a little longer than the specified recording time printed on the label. This unit can program tracks to use the extra time. When the total recording time is a little longer than the tape's specified recording time after editing, the display shows the extra time (without a minus mark), instead of the time remaining on the tape (with the minus mark).

NOTE

- The AI edit recording function cannot be used with discs containing 31 tracks or more.
- Recording is inhibited if the erasure prevention tab on either side of the tape is broken off.

PROGRAMMED EDIT RECORDING



In the programmed edit recording function the tracks can be programmed while checking the remaining time on each side of the tape as the tracks are programmed.

NOTE

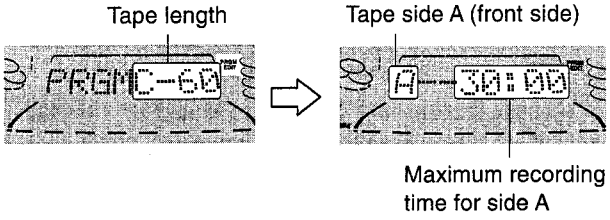
The programmed edit recording will not start from a point halfway in the tape. The tape must be recorded on from the beginning of either side.

1 **Insert the tape into deck 2, and press DOLBY NR to turn Dolby NR on or off.**
Insert the tape with the side to be recorded on first facing out from the unit.

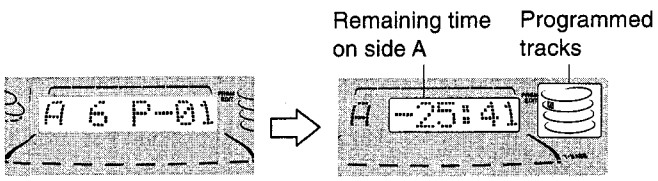
2 **Press CD and load the disc(s).**

3 **Press CD EDIT/CHECK twice.**
"EDIT" and "PRGM" are displayed.
• When "AI" is displayed, press **CD EDIT/CHECK** again.

4 **Press numbered buttons on the remote control to designate the tape length.**
10 to 99 minutes can be specified.
• The ◄◄, ►► or **MULTI JOG** are also available to designate the tape length.

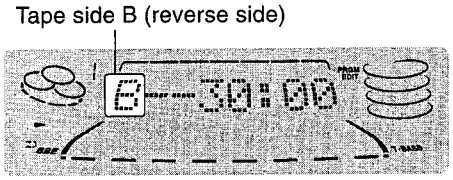


5 **Press DISC DIRECT PLAY 1-3 to select a disc. Then, press numbered buttons 0-9 and + 10 on the remote control to program a track.**
Example: To select the 10th track of disc 2, press **DISC DIRECT PLAY 2**, then press **+10** and **0**.



6 **Repeat step 5 for the rest of the tracks for side A.**
A track whose playing time is longer than the remaining time cannot be programmed.

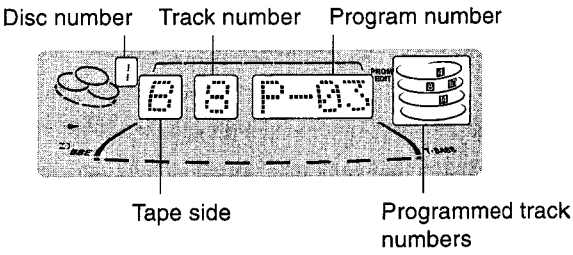
7 **Press CD EDIT/CHECK to select side B and program the tracks for side B.**
After confirming "B" on the display, repeat step 5.



8 **Press the ● REC/REC MUTE button to start recording.**
The tape is rewound to the beginning of the front side, the lead segment is played through for 10 seconds, and recording starts. When recording on the front side (A) ends, recording on the back side (B) starts.

To stop recording
Press ■. Recording and CD play stop simultaneously.

To check the order of the programmed track numbers
Before recording, press **CD EDIT/CHECK** to select side A or B, and press ◄◄ or ►► repeatedly.



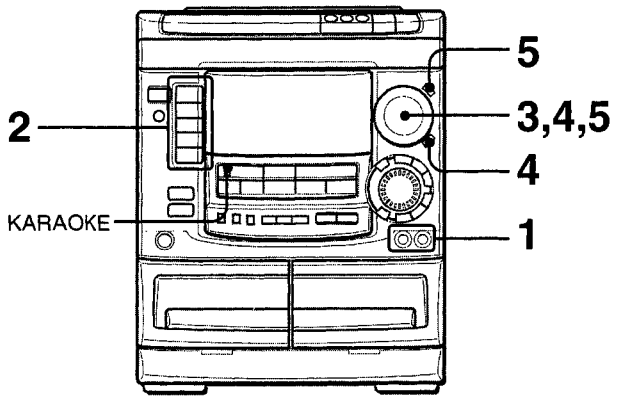
To change the program of each side
Press **CD EDIT/CHECK** to select side A or B, and press ■ **CLEAR** to clear the program on the selected side. Then program tracks again.

To clear the edit program
Press ■ **CLEAR** twice so that "EDIT" disappears on the display.

NOTE

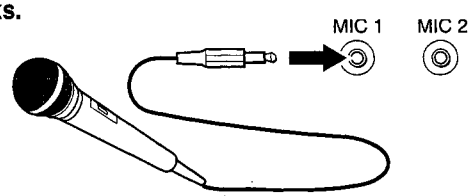
• Up to 30 tracks can be programmed from any of the inserted discs.
• Recording is inhibited if the erasure prevention tab on either side of the tape is broken off.

MICROPHONE MIXING



Two microphones (not supplied) can be connected to this unit, allowing you to sing along to music sources.
Use microphones with mini plugs (ø3.5 mm, 1/8 inch).

1 Connect your microphones to MIC 1 and MIC 2 jacks.



2 Press one of the function buttons to select the source to be mixed, and play the source.

3 Adjust the volume and tone of the source.

4 Press MIC and turn VOLUME within 4 seconds to adjust the microphone volume.

The microphone volume can be selected from 1 to MAX (7) or OFF (cancel).
The volume of both microphones is adjusted simultaneously.

5 Press ECHO and turn VOLUME within 4 seconds to adjust the echo level.

The echo level can be selected from 1 to MAX (7) or OFF (cancel).

To change the delay time of echo
Hold down **ECHO** while the echo is on.
"L" (Long) and "M" (Middle) are displayed alternately. At the desired position, release the button.

To record microphone sound mixed with source sound
Follow the procedure for recording from the sound source (see page 19).
SYNC DUB cannot be used for mixing recording.

When not using the microphones
Set the microphone volume and echo level to OFF and remove the microphones from **MIC** jacks.

NOTE

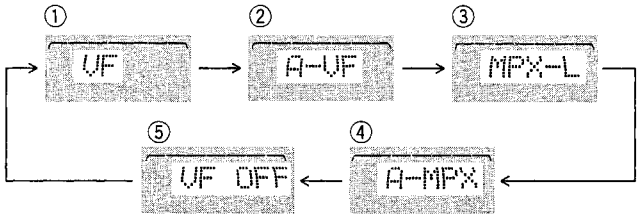
- When the MIC or ECHO level is changed, the SURROUND mode is automatically cancelled.
- If a microphone is held too near the speakers, a howling sound may be produced. In this case, hold the microphone away from the speakers, or decrease the microphone volume.
- If sound through the microphone is extremely loud, it may be distorted. In this case, decrease the microphone volume.
- When the function is changed, the microphone volume and the echo volume are set to off.

Recommended microphones
The use of unidirectional type microphones is recommended to prevent howling. Contact your local Aiwa dealer for details.

VOCAL FADER/MULTIPLEX FUNCTIONS

This unit can use discs or tapes as Karaoke sources.
Use the vocal fader function for ordinary discs or tapes.
Use the multiplex function for multi audio discs or tapes.

Press KARAOKE repeatedly to select the vocal fader or multiplex function.
Each time **KARAOKE** is pressed, one of these functions is selected cyclically.



① Vocal Fader
The singer's voice becomes softer than the accompaniment.

② Auto Vocal Fader
The singer's voice becomes softer only while there is audio input through a microphone.

③ Multiplex
Only the sound on the left channel is heard from both speakers, and the sound on the right channel is muted.

④ Auto Multiplex
The sound on the left channel is heard from both speakers, and the sound on the right channel is muted only while there is audio input through a microphone.

⑤ Cancel

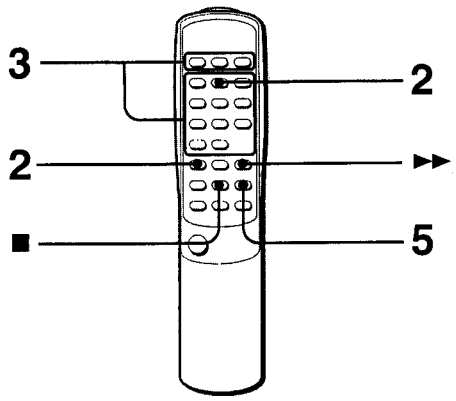
To change the time lag setting in Auto Vocal Fader or Auto Multiplex function
The muted original singer's voice can be turned faster than the normal level.
When Auto Vocal Fader or Auto Multiplex is selected, "A-VF" or "A-MPX" is displayed for 3 seconds and changes to the selected function name. After the selected function name is displayed, keep pressing **KARAOKE** until FAST is displayed.
To return to the initial setting, select SLOW.
When the power is turned off, SLOW is restored.

To change the audible channel in Multiplex function
When Multiplex is selected, "MPX -L" is displayed for 3 seconds and changes to the selected function name. After the selected function name is displayed, keep pressing **KARAOKE** until MPX-R is displayed.
To return to the initial setting, select MPX-L.
When the power is turned off, MPX-L is restored.

NOTE

- The Karaoke functions may not operate correctly with the following kinds of CDs or tapes.
  - Those with monaural sound.
  - Those recorded with strong echoes.
  - Those with the vocal part recorded on the right or left side of the sound width.
- While the Karaoke function is on, the sound is output as monaural.
- When the function is changed, the Karaoke function is cancelled.

KARAOKE PROGRAM

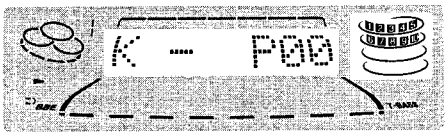


Before or during CD play, you can reserve up to 15 tracks to be played after the current track. Each reservation is cleared when it finishes playing.

Use the remote control.

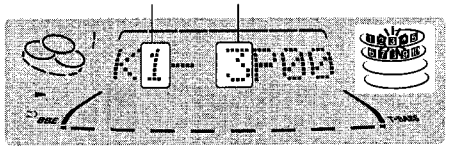
***1* Press CD and load the discs.**

***2* Press PRGM once while pressing SHIFT.**



***3* Press DISC DIRECT PLAY 1-3 to select a disc. Then, press numbered buttons 0-9 and + 10 to program a track.**

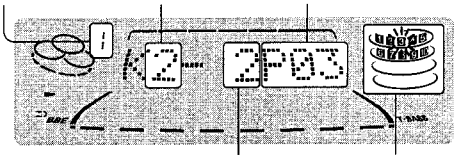
Reserved disc number Reserved track number



***4* Repeat step 3 to reserve other tracks.**

***5* Press ◄► to start play.**
After a track is played, it is cleared from the program.

Currently playing disc Disc number of the last reservation Number of remaining reserved tracks



Track number of the last reservation Currently playing track number flashes

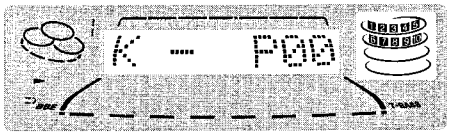
To add a reservation during play
Repeat step 3.

To check the reserved tracks
Press **CD EDIT/CHECK** repeatedly. Each time it is pressed, the disc number and track number are displayed in the reserved order.

To stop play
Press ■.
When ◄► is pressed, the play starts from the last track again.

To skip a current track
Press ►►. The skipped track is cleared from the program.

To clear all the reservations
Press ►► repeatedly until "K - P00" is displayed.

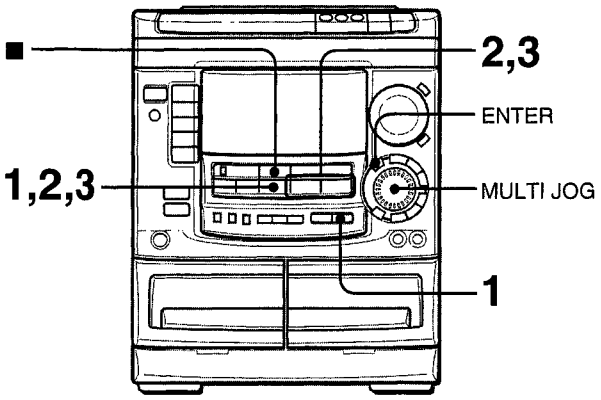


Press it once more to cancel the Karaoke programs. The display returns to that of CD play.

NOTE

- If the reserved track number does not exist on the selected disc, the unit stops playing and the display flashes. In this case, press ►► to skip the error track. Then press ◄► to start play with the next reserved track.
- When **PRGM** is pressed repeatedly in step 2, PRGM is displayed and the unit enters CD program play mode (page 18).
  To cancel program play, press ■ **CLEAR**.

SETTING THE CLOCK



1 Press CLOCK once, then press ▮▮ SET within 4 seconds.

When using the remote control
Press **CLOCK** while pressing **SHIFT**, then press **▮▮ SET** within 4 seconds.

2 Press ◀◀ DOWN or ▶▶ UP to designate the hour, then press ▮▮ SET.
The hour stops flashing and the minute starts flashing.

3 Press ◀◀ DOWN or ▶▶ UP to designate the minute, then press ▮▮ SET.
The minute stops flashing on the display and the clock starts from 00 seconds.

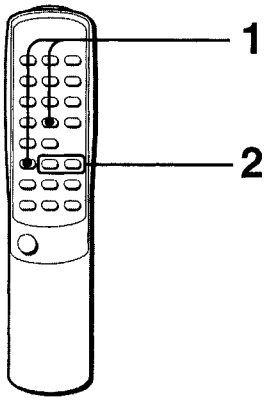
To display the current time
Press **CLOCK**. The time is displayed for 4 seconds.
However, the time cannot be displayed during recording.

To switch to the 24-hour standard
Press the **CLOCK** and then press ■ within 4 seconds.
Repeat the same procedure to restore the 12-hour standard.

If the clock display flashes
This is caused by a power interruption. The current time needs to be reset.
If power is interrupted for more than approximately 24 hours, all settings stored in memory after purchase need to be reset.

** **MULTI JOG** is also available instead of ◀◀ and ▶▶.*
** **ENTER** is also available instead of **▮▮ SET**.*

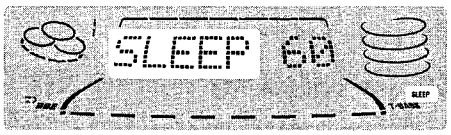
SETTING THE SLEEP TIMER



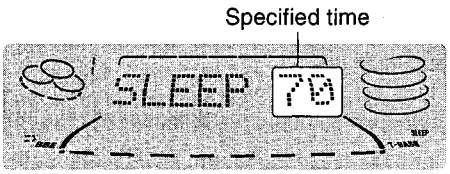
The unit can be turned off automatically at a specified time.

Use the remote control.

1 Press SLEEP while pressing SHIFT.



2 Within 4 seconds, press ◀◀ or ▶▶ to specify the time until the power is turned off.
Each time the button is pressed, the time changes between 5 and 240 minutes in 5-minute steps.

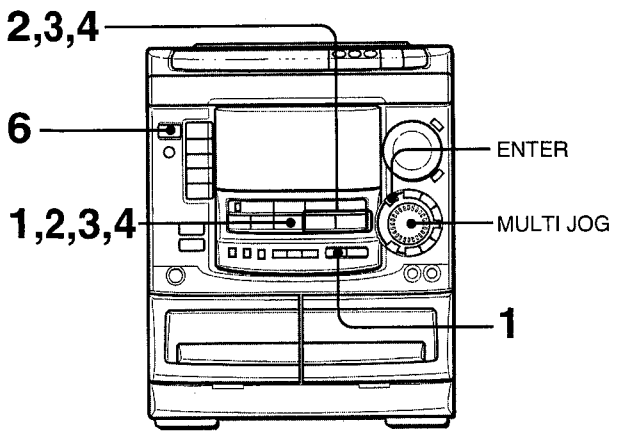


To check the time remaining until the power is turned off
Press **SLEEP** once while pressing **SHIFT**. The remaining time is displayed for 4 seconds.

To cancel the sleep timer
Press **SLEEP** twice while pressing **SHIFT** so that "SLEEP oFF" appears on the display.

** **MULTI JOG** is also available instead of ◀◀ and ▶▶.*

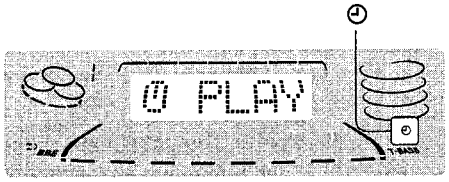
SETTING THE TIMER



The unit can be turned on at a specified time every day with the built-in timer.

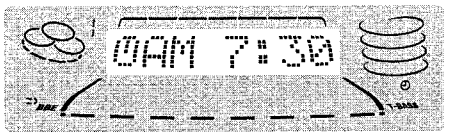
Preparation
Make sure the clock is set correctly.

1 **Press TIMER twice to display ⏲, then press ❚❚ SET within 6 seconds.**
⏲ is displayed and the hour flashes.



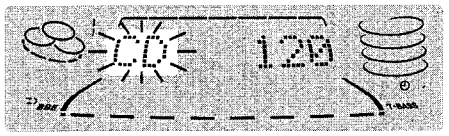
NOTE
If you press **❚❚ SET** after 6 seconds, another operation may start.

2 **Designate the hour of the timer-on time by pressing ◀◀ DOWN or ▶▶ UP, then press ❚❚ SET.**
Repeat to designate the minute of the timer-on time.

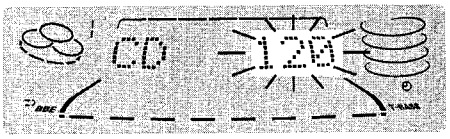


After you designate the timer-on time, one of the source names flashes on the display.

3 **Press ◀◀ DOWN or ▶▶ UP to select a source, then press ❚❚ SET.**
- If TUNER is selected, the band cannot be selected in this step.



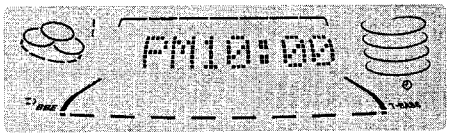
4 **Select the duration for the timer-activated period with ◀◀ DOWN or ▶▶ UP, then press ❚❚ SET.**



The duration for the timer-activated period can be set between 5 and 240 minutes in 5-minute steps.

5 **Prepare the source.**
To listen to a CD, load the CD to be played first on tray 1.
To listen to a tape, insert the tape into deck 1 or 2.
To listen to the radio, tune in to a station.

6 **Press POWER to turn the unit off after adjusting the volume and tone.**
⏲ remains on the display after the power is turned off (timer standby mode).



When the timer-on time is reached, the unit turns on and begins play with the selected source.
The volume level is automatically set to 20 when the power is turned off with the volume level set to 21 or more.

To check the specified time and source
Press **TIMER** twice. The timer-on time, the selected source name and the duration for the timer-activated period are displayed for 4 seconds.

To cancel timer standby mode temporarily
Press **TIMER** repeatedly until ⏲ or ⏲REC disappears on the display.
To restore the timer standby mode, press **TIMER** repeatedly to display ⏲ or ⏲REC.

Using the unit while the timer is set
You can use the unit normally after setting the timer.
Before turning off the power, carry out step 5 to prepare the source, and adjust the volume and tone.

NOTE
- Timer playback and timer recording will not begin unless the power is turned off.
- Connected equipment cannot be turned on and off by the built-in timer of this unit. Use an external timer.

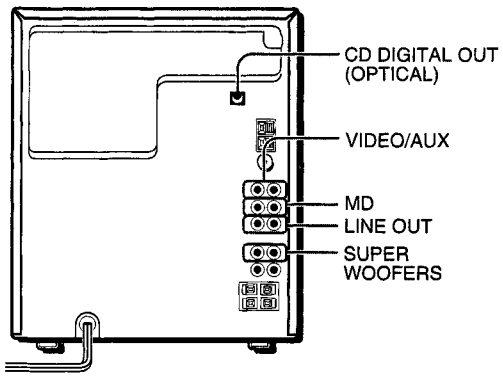
** **MULTI JOG** is also available instead of ◀◀ and ▶▶.*
** **ENTER** is also available instead of ❚❚ SET.*

TIMER RECORDING

Timer recording is applicable for TUNER and VIDEO/AUX (with an external timer) sources only.

Press TIMER repeatedly until ⏲REC appears on the display, then press ❚❚ SET within 6 seconds. Carry out the steps of "SETTING THE TIMER" from step 2 and insert the tape to be recorded on into deck 2 after step 5.

CONNECTING OPTIONAL EQUIPMENT



Refer to the operating instructions of the connected equipment for details.
- The connecting cords are not supplied. Obtain the necessary connecting cords.
- Consult your local Aiwa dealer for optional equipment.

VIDEO/AUX JACKS

This unit can input analogue sound signals through these jacks. Use a cable with RCA phono plugs to connect audio equipment (turntables, LD players, MD players, VCRs, TV, etc.).
Connect the red plug to the **VIDEO/AUX R** jack, and the white plug to the **VIDEO/AUX L** jack.

When connecting a turntable
Use an Aiwa turntable equipped with a built-in equalizer amplifier.

MD JACKS

These jacks are recommended to connect with an MD player. Use a cable with RCA phono plugs.
Connect the red plug to the **MD R** jack, and the white plug to the **MD L** jack.

LINE OUT JACKS

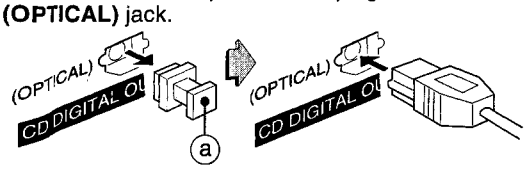
This unit can output analogue sound signal through these jacks. Use a cable with RCA phono plugs to connect audio equipment with **LINE IN** (analogue input) jacks.
Connect the red plug of a cable to **LINE OUT R** jack, and the white plug to **LINE OUT L** jack.

NOTE

Do not connect an equipment to **LINE OUT** jacks and **VIDEO/AUX** jacks simultaneously. Otherwise, noise is generated and malfunction occurs.

CD DIGITAL OUT (OPTICAL) JACK

This unit can output CD digital sound signals through this jack. Use an optical cable to connect digital audio equipment (DAT deck, MD recorder, etc.).
Remove the dust cap ⓐ from the **CD DIGITAL OUT (OPTICAL)** jack. Then, connect an optical cable plug to the **CD DIGITAL OUT (OPTICAL)** jack.

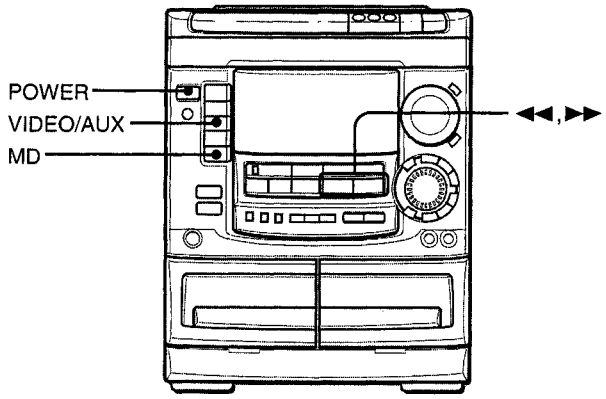


When the CD DIGITAL OUT (OPTICAL) jack is not being used
Attach the supplied dust cap.

SUPER WOOFERS JACKS

Connect optional powered sub woofer with built-in-amplifier to the jack.

LISTENING TO EXTERNAL SOURCES



To play a equipment connected to **VIDEO/AUX** jacks or **MD** jacks proceed as follows.

1 Press VIDEO/AUX or MD.

To play the equipment connected to VIDEO/AUX, press **VIDEO/AUX**. "VIDEO" appears on the display.
To play the equipment connected to MD, press **MD**. "MD" appears on the display.

2 Play the connected equipment.

To change a source name in the display
When **VIDEO/AUX** is pressed, "VIDEO" is displayed initially. It can be changed to "AUX" or "TV".
With the power on, press **POWER** while pressing **VIDEO/AUX**. Repeat the procedure to select one of the names.

To adjust the sound level of the external source
When the sound level of the external source is much higher or much lower than that of other function sources, adjust it as follows.
1 Press **VIDEO/AUX** or **MD** and play the equipment.
2 Press ◀◀ or ▶▶ so that the sound level becomes the same as that of other function sources.

NOTE

During recording, the sound level can not be adjusted.

CARE AND MAINTENANCE

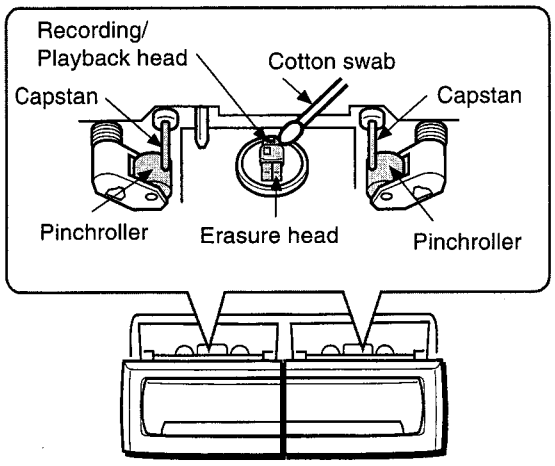
Occasional care and maintenance of the unit and the software are needed to optimize the performance of your unit.

To clean the cabinet

Use a soft and dry cloth.
If the surfaces are extremely dirty, use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents, such as alcohol, benzine or thinner as these could damage the finish of the unit.

To clean the heads and tape paths

After every 10 hours of use, clean the heads and tape paths with a head cleaning cassette or cotton swab moistened with cleaning fluid or denatured alcohol. (These cleaning kits are commercially available.)
When cleaning with a cotton swab, wipe the recording/playback head (deck 2 only), erasure head (deck 2 only), capstans, and pinchrollers.



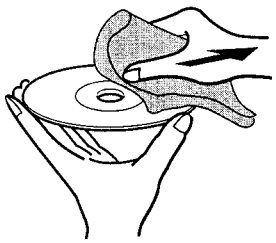
After cleaning the heads and tape paths with a liquid head cleaning cassette or a moistened swab, wait until the cleaned parts are completely dry before inserting the tapes.

To demagnetize the heads

The heads may become magnetized after long-term use. This may narrow the output range of recorded tapes and increase noise. After 20 to 30 hours use, demagnetize the heads with any commercially available demagnetizer.

Care of discs

- When a disc becomes dirty, wipe the disc from the centre out with a cleaning cloth.



- After playing a disc, store the disc in its case. Do not leave the disc in places that are hot or humid.

Care of tapes

- Store tapes in their cases after use.
- Do not leave tapes near magnets, motors, television sets, or any source of magnetism. This will downgrade the sound quality and cause noise.
- Do not expose tapes to direct sunlight, or leave them in a car parked in direct sunlight.

TROUBLESHOOTING GUIDE

If the unit fails to perform as described in these Operating Instructions, check the following guide.

GENERAL

There is no sound.
- Is the AC cord connected properly?
- Is there a bad connection? (→ page 4)
- There may be a short circuit in the speaker terminals.
  → Disconnect the AC cord, then correct the speaker connections.
- Was an incorrect function button pressed?

Sound is emitted from one speaker only.
- Is the other speaker disconnected?

The output sound is not stereo.
- Is the Karaoke function turned on? (→ page 23)

An erroneous display or a malfunction occurs.
→ Reset the unit as stated below.

TUNER SECTION

There is constant, wave-like static.
- Is the antenna connected properly? (→ page 4)
- Is the signal weak?
  → Connect an outdoor antenna.

The reception contains noise interferences or the sound is distorted.
- Is the system picking up external noise or multipath distortion?
  → Change the orientation of the antenna.
  → Move the unit away from other electrical appliances.

CASSETTE DECK SECTION

The tape does not run.
- Is deck 2 in pause mode? (→ page 15)

The sound is off-balance or not adequately high.
- Is the playback head dirty? (→ page 28)

Recording is not possible.
- Is the erasure prevention tab on the tape broken off? (→ page 16)
- Is the recording head dirty? (→ page 28)

Erasure is not possible.
- Is the erasure head dirty? (→ page 28)
- Is a metal tape being used?

High frequency sound is not emitted.
- Is the recording/playback head dirty? (→ page 28)
- Is a tape recorded without Dolby NR played back with the Dolby NR system operating? (→ page 16)

CD PLAYER SECTION

The CD player does not play.
- Is the disc correctly placed? (→ page 17)
- Is the disc dirty? (→ page 28)
- Is the lens affected by condensation?
  → Wait approximately one hour and try again.

To reset

If an unusual condition occurs in the display window or the cassette decks, reset the unit as follows.

1 Press **POWER** to turn off the power.
2 Press **POWER** to turn the power back on while pressing ■ **CLEAR**. Everything stored in memory after purchase is canceled.

If the power cannot be turned off in step 1 because of a malfunction, reset by disconnecting the AC cord, and connect it again. Then carry out step 2.

SPECIFICATIONS

Main unit CX-NS505/CX-NS506

FM tuner section

Tuning range	87.5 MHz to 108 MHz
Usable sensivity (IHF)	16.8 dBf
Antenna terminal	75 ohms (unbalanced)

MW tuner section

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

LW tuner section

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 µV/m
Antenna	Loop antenna

Amplifier section

Power output	Rated: 60 W + 60 W (6 ohms, T.H.D. 1 %, 1 kHz/DIN 45500) Reference: 75 W + 75 W (6 ohms, T.H.D. 10 %, 1 kHz/DIN 45324) DIN MUSIC POWER: 180 W + 180 W
Total harmonic distortion	0.07 % (50 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 150 mV (adjustable) MD: 150 mV (adjustable) MIC 1, MIC 2: 1.0 mV (10 kohms)
Outputs	SUPER WOOFERS: 1.9 V LINE OUT: 200 mV SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 8 ohms to 16 ohms PHONES (stereo jack): accepts headphones of 32 ohms or more

Cassette deck section

Track format	4 tracks, 2 channels stereo
Frequency response	CrO_2 tape: 50 Hz – 16000 Hz Normal tape: 50 Hz – 15000 Hz
Recording system	AC bias
Heads	Deck 1: Playback head × 1 Deck 2: Recording/playback head × 1, erase head × 1

Compact disc player section

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

General

Power requirements	230 V AC, 50 Hz
Power consumption	120 W
Dimensions of main unit (W × H × D)	260 × 329.1 × 344.5 mm
Weight of main unit	6.7 kg

Speaker system SX-FNS505 (For NSX-S505)

Cabinet type	3 way, bass reflex with surround speaker (magnetic shielded type)
Speakers	Woofer: 160 mm cone type Tweeter: 80 mm cone type Super tweeter: 20 mm ceramic type Surround speaker: 80 mm
Impedance	Front speaker: 6 ohms Surround speaker: 8 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W × H × D)	250 × 324 × 275 mm
Weight	3.9 kg

Speaker system SX-ANS706 (For NSX-S506)

Cabinet type	4 way, bass reflex with surround speaker (magnetic shielded type)
Speakers	Woofer: 160 mm cone type Tweeter: 50 mm cone type Super tweeter: 20 mm ceramic type Cardioid speaker: 80 mm cone type Surround speaker: 60 mm
Impedance	Front speaker: 6 ohms Surround speaker: 8 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W × H × D)	250 × 330 × 293 mm
Weight	4.6 kg

Specifications and external appearance are subject to change without notice.

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OBSERVERA

Så länge som apparaten är ansluten till nätet flyter en svag ström genom densamma, även då den är avstängd. Om man under en längre tid ej har för avsikt att använda den, drag då ur nätkabeln.

BEMÆRK

Apparatet er stadig forbundet med lysnettet, så længe stikket er tilsluttet til stikkontakten, selv om afbryteren er slået fra. Hvis apparatet ikke bruges i længere tid, skal netledningen trækkes ud.

Principle of Aiwa's Front 180° Speaker System

(NSX-S506 only)

Aiwa's Front 180° Speaker System provides excellent sound balance for true stereo reproduction from any listening angle.

In stereo sound reproductions systems up to now, the listening area where the optimal stereo effect is obtained has been extremely narrow. This is due to the following reasons.

As shown in Figure 2, a conventional stereo system has speakers on the front panel of the speaker system, pointing forward. It is designed for listening in a location directly in front of the front speaker panel.

In this case, as shown in Figure 2, a listener at point ⓐ, located on the center line between the right and left speakers, hears the voice of a singer coming from the center front. Instrumental sounds are distributed evenly between both speakers for an optimal stereo effect.

At point ⓑ, however, located off the center line between the speakers, the distance from the left speaker to the listener is greater than the distance from the right speaker. Sound from the left speaker appears to be faint, and sound from the right speaker appears to be loud. Sound is perceived as coming from the speaker with the greater volume, so that the singer's voice appears to shift toward the right speaker. The normally balanced instrumental sounds also appear to come primarily from the right speaker.

Moreover, since the directivity of speakers increases with higher frequencies, high-frequency sounds from the left speaker become even harder to hear, increasing the impression of imbalance.

For these reasons, the listening area which provides even sound balance and the optimal stereo effect is limited to the narrow area shown in Figure 2-ⓐ.

To solve this problem, Aiwa has developed uni-directional speakers for this new speaker system featuring cardioid directivity for frequencies of 1 kHz or less. These speakers are pointed inward at angles of 45° (see Figure 1). Driven by left and right stereo sound signals, these speakers act to increase the width of the optimum listening area (see Figure 3). Because of their cardioid directivity and the 45° angle of their main speaker axis, they provide enhanced sound reproduction at point ⓑ in Figure 3. The left speaker is pointed toward the listener, and the right speaker is pointed away from the listener, so that the directivity of the speakers compensates for the differences in perceived volume caused by the differences in distance to the listener. Therefore, the sound of a singer's voice is perceived as coming from a point midway between the speakers, and instrumental sounds are distributed evenly.

Figure 1 **Front 180° speaker system**

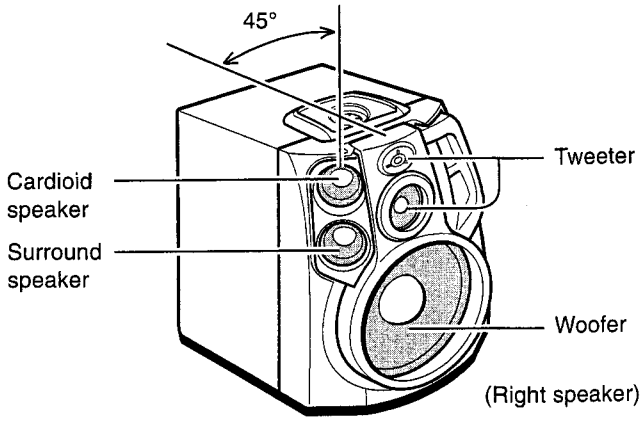
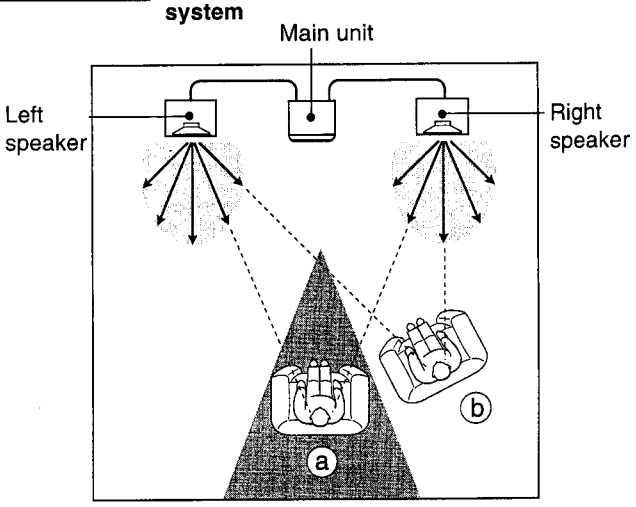


Figure 2 **Stereo effect with a conventional speaker system**



ⓐ Center listening point: Balanced sound heard from left and right speakers

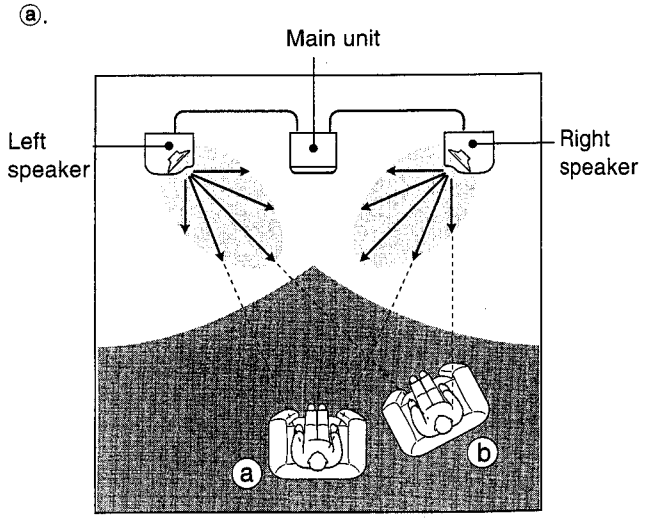
ⓑ Off-center listening point: Right speaker sounds louder than left speaker

→: Sound pressure level

▒: Stereo listening area

Figure 3 **Stereo effect with Aiwa Front 180° speaker system**

True stereo sound can be heard at point ⓑ as well as point ⓐ.



→: Sound pressure level

▒: Stereo listening area of new speakers

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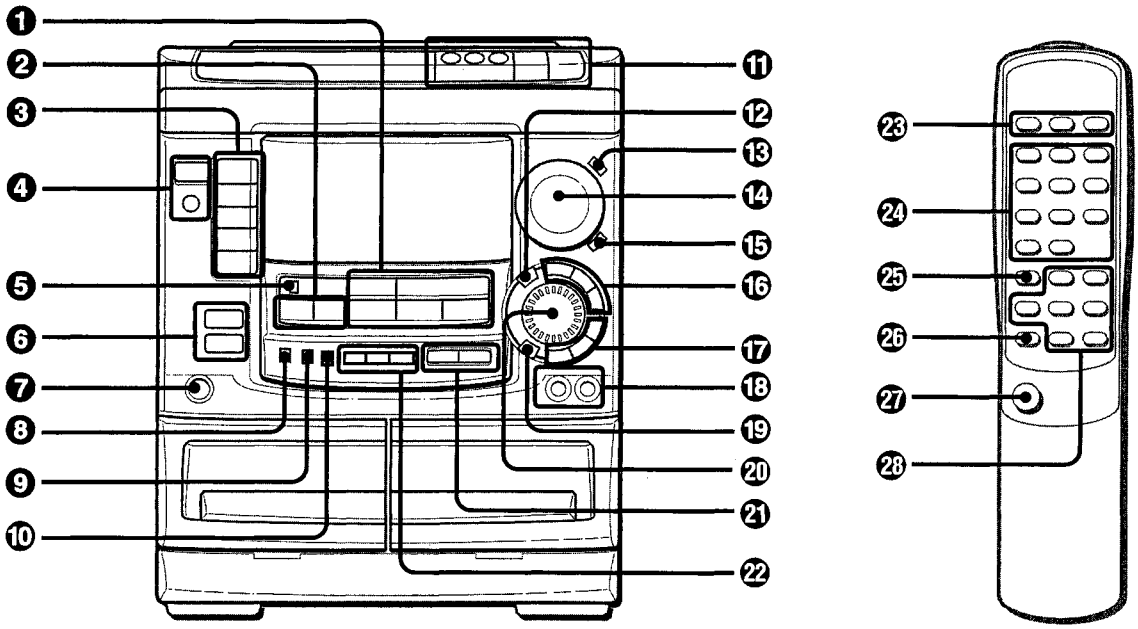

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AIWA CO.,LTD.

Printed by: Schaltungsdienst Lange Berlin (Germany)